



# PITTSBURGH COMMODITY INDEX

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COMPILED BY  
PITTSBURGH  
INDUSTRIAL  
DEVELOPMENT  
COMMISSION

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## **NOTICE**

For the purpose of assisting in the work of making the next issue of this book thoroughly complete, please note any additions or alterations on this blank.

**REMARKS:—**



## FOREWORD

In presenting this work for the consideration of buyers, the Pittsburgh Industrial Development Commission has endeavored to perform a service to the community in general and to local manufacturers and jobbers in particular. The enormous and unparalleled growth which has been enjoyed by manufacturers in the Pittsburgh district is so well known that the stupendous task involved in the classifying of the commodities manufactured and sold in this district can be readily appreciated.

The sole purpose has been to make accessible to immediate reference every commodity that Pittsburgh can provide.

Recently, at the expense of this Commission, the first census of the Pittsburgh metropolitan district was compiled, showing that \$365,000,000 is spent annually for material by local manufacturers alone. Not all of these materials are supplied by local producers, and buyers are often ignorant of the fact that certain commodities, for which they are not regularly in the market, are readily available at home.

It is not commonly known that the manufactured products of the Pittsburgh district exceed those of any one of twenty entire states. Moreover, the fact is not generally known that the diversified products of Pittsburgh, exclusive of all metals, glass or electrical products, exceed the entire product of twelve individual states. These facts make it apparent that such a work as this has been a long deferred necessity. Approximately 20,000 commodities are listed in this book, representing the products of more than 1,600 manufacturers and nearly 800 jobbers; the classification of jobbers being restricted to those who carry stock on hand.

Stimulated by the efforts of this Commission there has recently been established a co-operative spirit in the community and a public desire to patronize home industries, when such patronage would not be prejudicial to good business practice. Unfortunately, however, it has not always been possible to exercise the desire because no complete directory has ever

before been available covering the many thousands of commodities which the community produces. For the purpose of making it possible for Pittsburghers to patronize themselves this book is offered. For the further purpose of making it possible for the manufacturer generally to appreciate Pittsburgh's contribution to the welfare of mankind this book is also presented. It is the further intent of this Commission to have this work translated into Spanish and other tongues for the purpose of stimulating and encouraging export trade.

The work herein presented is a contribution of the Commercial Clearing House Department of the Pittsburgh Industrial Development Commission. This department has for its special function the consideration, adjustment and reconciliation of such difficulties as may arise in the pursuit of the commercial activities of the community. The functions of this department include the giving of information concerning products produced in the district; the adjustment of differences whereby local commodities suffer because of quality, or price, in competition with other communities. Every purchaser, jobber, manufacturer or consumer, in this or any other community, is privileged to avail himself of the services of this or any other department of this Commission without obligation.

It is the firm conviction of the Pittsburgh Industrial Development Commission that this work will be the vehicle through which the jobbers and manufacturers of this district will find commercial stimulus and thereby serve to promote the progress and preserve the prosperity of Pittsburgh.

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North Side,  
South Side,  
Duquesne,  
Etna,  
Pittsburgh.  
Offices, Carnegie Building.  
Tel. 3880 Court.  
J. M. Taylor, P. A.  
A. M. Harper, S. M.

**CARR, W. G.,**  
309 Fourth Avenue,  
Tel. 4458 Court.

**CARRON, A. M. MACHINE CO.,**  
Penn Avenue and Third Street.  
Tel. 4312 Court.  
R. P. Humes, S. M.

**CARTER IRON CO.,**  
307 Fifth Avenue.  
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R. A. Carter, S. M.

**CASTALIA PORTLAND CEMENT CO.,**  
Publication Building.  
Tel. 379 Grant.

**CENTRAL BOILER, TANK AND PLATE  
IRON WORKS.**  
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**CENTRAL CAR WHEEL CO.,**  
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(See Pressed Steel Car Co.)

**CENTRAL TUBE CO.,**  
Thirty-fifth and Smallman Streets,  
Office, Lewis Block.  
Tel. 1685 Grant.  
William F. Ingale, S. M.

**CENTRAL TUBING CO.,**  
Economy, Pa.  
Tel. 430 Sewickley.

**CHAMBERLAIN CO.,**  
Sixth Avenue and Grant Street.  
Tel. 3110 Grant.

**CHAPMAN, A. V.,**  
214 Market Street.  
Tel. 1194 Court.

**CHAMBERLAIN & JOHNSON,**  
74 Spring Garden Avenue, N. S.  
John J. Barkley, Mgr.  
Tel. 852 Cedar.

**CHAPLIN-FULTON MFG. CO.,**  
34 Penn Avenue.  
Tel. 1201 Court.  
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J. M. McKee, S. M.

**CHARLEROI FOUNDRY & MACHINE CO.,**  
Charleroi, Pa.  
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J. F. Donaghay, Mgr.

**CITIZENS ICE CO.,**  
First and West Streets.  
Tel. 1431 Court.

**CLARK, THE D. L. CO.,**  
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C. R. Adamson, S. M.

**CLARK SAFE & VAULT CO.,**  
Van Kirk, Pa.  
Office, 225 Third Avenue.  
Tel. 298 Court.

**CLEANOLA CO., THE,**  
Fulton Building.  
Tel. 1469 Grant.

**CLIFFORD FAN WORKS,**  
Jeannette, Pa.  
Tel. 360 L Jeannette.  
William Clifford, Pres.

**CLINTON IRON & STEEL CO.,**  
West Carson Street.  
Tel. 3294 Court.

**CLYDESDALE STONE CO.,**  
Beaver, Pa.  
Office, Oliver Building.  
Tel. 2365 Grant.

**COAL AND COKE BY-PRODUCTS CO.,**  
421 Wood Street.  
Tel. 1007 Court.

**COCA COLA CO., THE,**  
Terminal Building.  
Tel. 628 Hemlock.

**COCHRANE BROS.,**  
115 Jarvelia Street, N. S.  
Tel. 861 Cedar.

**COLDITZ & McMINN,**  
720 N. Canal Street, N. S.  
Tel. 196 J Cedar.  
Daniel L. Deidrich, Mgr.

**COLE, E. P.,**  
Neville Island.  
Tel. 713 Victor.

**COLLINS, FRANK,**  
O'Hara Street, McDonald, Pa.  
Tel. 36 McDonald.

**COLLINS & WRIGHT,**  
5501 Butler Street.  
Tel. S21 Fisk.

**COLONIAL ART FURNITURE CO.,**  
3906 Fifth Avenue.  
Tel. 1986 Schenley.

**COLONIAL FLOOR CO.,**  
Cecil Street, Sharpsburg, Pa.  
Tel. 96 Sharpsburg.  
Arthur Booth, Sec.

**COLONIAL STEEL CO.,**  
Colona, near Monaca, Pa.  
Office, Keystone Building.  
E. H. Ridgeway, P. A.  
C. M. Brown, S. M.

**COLUMBIA MFG. CO.,**  
4263 Fifth Avenue.  
Tel. 930 Schenley.

**COLUMBIA METAL POLISH CO.,**  
1729 Carson Street, S. S.  
Tel. 731 R Hemlock.

**COLUMBIA STEEL & SHAFTING CO.,**  
Rankin, Pa., and Carnegie, Pa.  
Office, Empire Building.  
Tel. 277 Court.  
Harry Teegan, S. M. and P. A.

**COMBINATION ENGINE CO.,**  
3148 Penn Avenue.  
Tel. 308 L Fisk.

**COMMERCIAL SASH & DOOR CO.,**  
Liberty Avenue and Thirty-third Street.  
Tel. 558 Fisk.  
Paul C. Keyes, P. A.  
A. K. Rabe, S. M.

**CONCRETE PRODUCTS CO. OF PITTSBURGH,**  
Neville Island.  
Tel. 708 Victor.  
I. M. Fickeisen, Pres.

**CONDON BROS. CO.,**  
1020 Rebecca Street, N. S.  
Tel. 2028 Cedar.

**CONROY-PRUGH & CO.,**  
1430 Western Ave., N. S.  
Tel. 3361 Cedar.  
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W. E. Conroy, S. M.

**CONSOLIDATED EXPANDED METAL CO.,**  
Rankin, Pa.  
Tel. 460 Braddock.  
W. C. Charlton, Sec.

**CONSOLIDATED ICE CO.,**  
Thirteenth and Pike Streets.  
Tel. 618 Grant.

**CONSOLIDATED LAMP & GLASS CO.,**  
Coraopolis, Pa.  
Tel. 6 Coraopolis.  
J. F. Kirk, Pres.

**CONSOLIDATED STONE & MINING CO.,**  
Ellwood City, Pa.  
Office, Hamilton Building.  
G. B. Ingham, S. M.

**CONTINENTAL STEEL & SUPPLY CO.,**  
Ellwood City, Pa.  
Office, Fulton Building.  
Tel. 3043 Grant.

**CO-OPERATIVE FLINT GLASS CO., Ltd.,**  
Beaver Falls, Pa.  
Tel. 31 Beaver Falls.  
C. W. Klein, Sec.

**CORAOPOLIS INDUSTRIAL CO.,**  
Coraopolis, Pa.  
Tel. 400 J Sewickley.

**CORNWALL, E. & CO.,**  
709 Sarah Street, S. S.  
Tel. 12 J Hemlock.

**COSHOCOTON IRON CO.,**  
Monongahela, Pa.  
P. O. Address, Axleton, Pa.  
Tel. 87 Monongahela.

**COWAN MFG. CO.,**  
206 North Sheridan Ave.  
Tel. 1813 Hiland.

**CRANFORD CONSTRUCTION CO.,**  
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Office, House Building.  
Tel. 2247 Court.  
F. G. Cunningham, S. M.

**CRESCENT BOTTLE CO.,**  
McDonald, Pa.  
Tel. 148 McDonald.  
Clifton H. Beach, S. M.

**CRESCENT BREWING CO.,**  
Pennsylvania Avenue, Irwin, Pa.  
Tel. 101 Irwin.

**CRESCENT BREWING CO.,**  
Washington, Pa.  
Tel. 298 Washington.

**CRESCENT CIGAR CO.,**  
416 Grove Street.  
Tel. 4152 M (P. & A.)

**CRESCENT ELECTRIC MFG. CO.,**  
24th Street and Liberty Avenue.  
Tel. 3620 Grant.

**CRESCENT FORGING CO.,**  
Hulton, Pa.  
Tel. 118 Oakmont.

**CRESCENT OIL CO.,**  
7 West Canal Street, N. S.  
Tel. 539 J Cedar

**CRESCENT PIPE LINE CO.,**  
Vandergrift Building.  
Tel. 872 Court.

**CRESCENT PORTLAND CEMENT CO.,**  
Wampum, Pa.  
Tel. 19 Wampum.  
R. H. Hughes, Mgr.

**CRIST & SCHILKEN CO.,**  
543 Fourth Avenue,  
Tel. 2878 Court.

**CROWN CHEMICAL CO.,**  
Gross Street.  
Office, Farmers Bank Building.  
Tel. 3112 Grant.  
J. H. Crist, P. A.

**CROWN WALL PLASTER CO.,**  
Second Street, Braddock, Pa.  
Tel. 67 Braddock.

**CRUCIBLE STEEL CO. OF AMERICA,**  
Oliver Building.  
Tel. 3800 Grant.

**CRUIKSHANK BROS. CO.,**  
Preble and Island Avenues, N. S.  
Tel. 4029 Cedar.

**CULLEN & BRODY,**  
5932 Baum Street.  
Tel. 1900 Hiland.  
John M. Brody, S. M.

**CUMMINGS FILTER CO.,**  
Twenty-seventh St. and Liberty Ave.  
Tel. 594 Fisk.  
J. H. R. Staub, Mgr.

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Tel. 416 Hemlock.

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J. F. Boyce.

**CURTIS TOWEL RACK CO.,**  
4507 Butler Street.  
Tel. 1007 Fisk.

**CYCLOPS FOUNDRY CO.,**  
Monongahela, Pa.  
Office, Union Bank Building.  
Tel. 2674 Court.

**DAMASCUS BRONZE CO.,**  
Sturgeon Avenue, N. S.  
Tel. 2400 Cedar.  
W. E. Cartwright, P. A.  
W. B. Klee, S. M.

**DANBER, R. H.,**  
845 Penn Street, N. S.  
Tel. 656 Cedar.

**DANZINGERS BROOM MFG. CO.,**  
90 Roberts Street.  
Tel. 3413 J Grant.

**DARLINGTON BRICK CO.,**  
6366 Frankstown Avenue.  
Tel. 180 Hiland.  
J. C. Adams, Mgr.  
D. J. Kennedy, S. M.

**DAUGHERTY BROS. BRICK CO.,**  
Kittanning, Pa.

**DAUM, A. F. & CO.,**  
319 East Reliance Street, N. S.  
Tel. 602 Cedar.

**DAVIS & MASON,**  
Manufacturers Building.  
Tel. 4247 Court.

**DAVIS & WARDE,**  
First Avenue and Ross Street.  
Tel. 1905 Court.

**DAVISON, J. K. & BRO.,**  
Forty-second and Davidson Streets.  
Tel. 62 R Fisk.

**DAWES, JOHN L. MFG. CO.,**  
12 Isabella Street, N. S.  
Tel. 29 Cedar.  
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**DEIDRICK, GEORGE H.,**  
138 Ninth Street.  
Tel. 2047 Grant.

**DEISENROTH WAGON WORKS,**  
44 South Eighth Street, S. S.  
Tel. 219 R Hemlock.

**DEMMLER & SCHENCK,**  
434 Penn Avenue.  
Tel. 10S5 Court.

**DENHOLM, J. M. BROS & CO.,**  
Frankstown and Fifth Avenues.  
Tel. 2500 Hiland.

**DERINGER, ANTON,**  
41 South Fourteenth Street, S. S.  
Tel. 665 J Hemlock.

**DERINGER, FRANK,**  
Juniata and Metropolitan Streets, N. S.  
Tel. 4013 R Cedar.

**DES MOINES BRIDGE & IRON CO.,**  
Neville Island.  
Office, Curry Building.  
Tel. 2072 Court.  
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W. W. Hendrix, S. M.

**DEUTENBERG, F. A.,**  
126 South Eighteenth Street, S. S.  
Tel. 791 Hemlock.

**DIAMOND FELT & MFG. CO.,**  
Sharpsburg, Pa.  
Tel. 61 Sharpsburg.

**DIAMOND FORGING & MFG. CO.,**  
Chartiers Street and Ridge Avenue, N. S.  
Tel. 3442 Cedar.  
G. Wickersham, Gen. Mgr.

**DIAMOND HARDWARE MFG. CO.,**  
Wilkinsburg, Pa.  
Office, 219 Diamond Street.  
Tel. 4796 Court.

**DIAMOND MACHINE CO.,**  
Monongahela, Pa.,  
Black Diamond, Pa.  
Tel. 9 Monongahela.  
S. C. Webb, Mgr.

**DIAMOND MATTRESS CO.,**  
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Tel. 874 J Cedar.  
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**DIEBOLD LUMBER & MFG. CO.,**  
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Tel. 9 Walnut.  
E. M. Diebold, S. M.

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Joseph Dilworth, P. A.  
W. F. Schleiter, S. M.

**DIXON, CHARLES E. & SON,**  
3027 Liberty Avenue.  
Tel. 369 Fisk.

**DIXON, H. L. CO.,**  
Carnegie, Pa.  
Tel. 265 Carnegie, Pa.  
H. J. White, Sec.

**DOEHLA WAGON CO.,**  
1057 Ohio Street, N. S.  
Tel. 229 J Cedar.

**DOMHOFF WAGON CO.,**  
4514 Friendship Avenue.  
Tel. 193 Fisk.

**DOUBLEDAY-HILL ELECTRIC CO.,**  
719 Liberty Avenue.  
Tel. 1577 Grant.

**DRAVOSBURG DOCK CO.,**  
Dravosburg, Pa.  
Tel. 1329 McKeesport.

**DREESEN, WILLIAM CO.,**  
580S Kirkwood Street.  
Tel. 4S28 Hiland.

**DU BARRY, G. D. & CO.,**  
Forty-first Street and A. V. R. R.  
Tel. S16 Fisk.

**DUER SPRING & MFG. CO.,**  
Thompson Avenue, McKees Rocks, Pa.  
Tel. 370 Victor.

**DUFF MFG. CO.,**  
405 Marion Avenue, N. S.  
Tel. 1897 Cedar.  
G. A. Edgin, P. A.  
E. A. Johnson, S. M.

**DUFF, P. & SONS,**  
Duquesne Way.  
Tel. 400 Grant.  
D. C. Woods, P. A.  
W. H. Duff, S. M.

**DUFF PATENTS CO.,**  
(See Duff Mfg. Co.)

**DUNCAN & MILLER GLASS CO.,**  
Washington, Pa.  
Tel. 18 Washington.

**DUNLAP, JOHN CO.,**  
Gregg Street, Carnegie, Pa.  
Tel. 12 Carnegie.

**DUNLEVY & BROS. CO.,**  
Hamilton Avenue and Enterprise Street.  
Tel. 5900 Hiland.  
C. J. Walsh, Gen. Mgr.

**DUQUESNE AUTO PARTS CO.,**  
5715 Kirkwood Street.  
Tel. 2903 Hiland.

**DUQUESNE COKE CO.,**  
Oliver Building.  
Tel. 3058 Grant.

**DUQUESNE MOTOR CAR CO.,**  
Thirty-first and Liberty Avenue.  
Tel. 1280 Fisk.

**DUQUESNE METAL POLISH CO.,**  
53 South Fifteenth Street, S. S.  
Tel. 162 J Hemlock.  
H. J. Flecker, Prop.

**DUQUESNE OIL & SUPPLY CO.,**  
3300 Smallman Street.  
Tel. 205 Fisk.

**DUQUESNE REDUCTION CO.,**  
Gross and Yew Streets.  
Office, Farmers Bank Building.  
Tel. 1278 Grant.

**DUQUESNE RUG CO.,**  
River Avenue, North Side.

**DUQUESNE STEEL FOUNDRY CO.,**  
Coraopolis, Pa.  
Office, Fourth Avenue and Wood Street.  
Tel. 3106 Court.  
Lawrence W. Frank, S. M.

**DUQUESNE CIGAR CO., THE,**  
Twenty-fifth and Smallman Streets.  
Tel. 313 Grant.  
W. L. Flagg, P. A. and Pres.

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Tel. 54 Walnut.

**DUQUESNE TOOL MFG. CO.,**  
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Tel. 2653 J Grant.

**EAGLE LUBRICATING OIL CO.,**  
226 First Avenue.  
Tel. 491 Court.

**EAGLE PAINT AND VARNISH CO.,**  
225 Grant Avenue.  
Tel. 244 Cedar.  
E. J. Wilson, Mgr.

**EAGLE TOOL AND MACHINE CO.,**  
519 Ann Street, N. S.  
Tel. 899 Cedar.

**EAGLE WAGON WORKS,**  
101 Grant Avenue, N. S.  
Tel. 194 Cedar.

**EARLY, W. J. & SONS, Ltd.,**  
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Tel. 243 Hemlock.

**EAST END ART FURNITURE CO.,**  
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**EAST END BRASS AND ELECTRO PLATING CO.,**  
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Tel. 4795 Hiland.

**EAST END HIDE CO.,**  
Putnam Street.  
Tel. 3408 Hiland.

**EAST END MANTLE & TILE CO.**  
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**ECLIPSE PATTERN CO.,**  
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**ECONOMY DISTILLING CO.,**  
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Office, Manufacturers Building.  
Tel. 667 Court.

**EDGECOMB, W. H. & SONS,**  
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**EDGECOMB & PYLE WIRELESS CO.,**  
6031 Kirkwood Street.  
Tel. 2456 R Hiland.

**EICHLEAY, JOHN Jr. CO.,**  
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S. A. Hegerling, P. A.

**EILER LUMBER & MILL CO.,**  
S. Twenty-third and Wharton Sts., S. S.  
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C. S. Dyer, Mgr.  
W. H. Eiler, S. M.

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D. B. Blackburn, V. P.

**ELECTRIC WELDING CO.,**  
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Tel. 4508 Court.

**ELLIOTT, B. K. CO.,**  
108 Sixth Street.  
Tel. 3609 Court.

**ELLIOTT CO.,**  
6907 Susquehanna Street.  
Tel. 120 Hiland.  
James E. Wolsall, S. M.

**ELSESSOR, A. BROS.,**  
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Tel. 345 R Cedar.

**ELVERSON, W. H. POTTERY CO.,**  
New Brighton, Pa.  
Tel. 1307 New Brighton.

**EMERGENCY TRUNK AND BAG CO.,**  
615 Liberty Ave.  
Tel. 1255 Grant.

**EMERSON, SMITH & CO.,**  
First Ave., Beaver Falls, Pa.  
Tel. 36 Beaver Falls.  
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**ENAMELED METALS CO.,**  
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Tel. 155 Sharpsburg.  
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**ENTERPRISE FOUNDRY CO.,**  
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Tel. 3136 Cedar.

**ENTERPRISE SAND CO.,**  
Fulton Building.  
Tel. 3044 Grant.  
Ira E. Bixler, Mgr.

**ENTERPRISE STAMPING CO.,**  
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Tel. 185 Victor.

**ENTRESS BRICK CO.,**  
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Tel. 26 Schenley.

**EPPING-CARPENTER CO.,**  
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Robert Sey, S. M.

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434 First Avenue.  
Tel. 2590 Court.

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Office, House Building.  
Tel. 3257 Court.  
Frank Ryman, Mgr.

**ETNA FOUNDRY CO.,**  
Union Street, Etna, Pa.  
Tel. 245 Sharpsburg.

**EVANS MFG. CO.,**  
S. McKean Street, Butler, Pa.  
Tel. 85 Butler.  
W. A. Gerner, Mgr.

**EXCELSIOR BROOM CO.,**  
1436 Spring Garden Avenue, N. S.  
Tel. 2594 Cedar.

**EXCELSIOR PATTERN CO.,**  
103 Water Street.  
Tel. 4710 Court.

**EXCESS INDICATOR CO.,**  
921 French Street.  
Tel. 333 Grant.

**EXPANDED METAL FIRE PROOF CO.,**  
Home Trust Building, 541 Wood Street.  
Tel. 2972 Grant.  
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**FAWCUS MACHINE CO.,**  
2820 Smallman Street.  
Tel. S10 Fisk.  
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A. M. Cook, S. M.

**FEATH & KERR,**  
Third and McClure Avenues,  
Homestead, Pa.  
Tel. 56 Homestead.

**FEICK BROS. CO.,**  
809 Liberty Avenue.  
Tel. 247 Grant.  
Robert A. Fulton, P. A. and S. M.

**FERGUSON, H. B.,**  
77 Chatham Street.  
Tel. 291 L Grant.

**FERGUSON TIN PLATE CO.,**  
Torrens Street and P. R. R.  
Tel. 242 Hiland.  
F. H. Speer, S. M.

**FERGUSON & HENE,**  
1018 Fifth Avenue.  
Tel. 1933 Grant.

**FERROFIX BRAZING CO.,**  
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Tel. 505 Fisk.

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Tel. 320 Hemlock.  
H. C. Herr, S. M.

**FIBER HORSESHOE CO.,**  
Shousetown, Pa.  
Tel. 75 R-11 Coraopolis.

**FIBRE GAS MANTLE MFG. CO.,**  
108 Diamond Street.  
Tel. 2606 Court.  
E. T. Jones, S. M.

**FIDELITY GLASS CO.,**  
Tarentum, Pa.  
Tel. 57 Tarentum.

**FINCH, JOSEPH S. & CO.,**  
129 McKean Street, S. S.  
Tel. 745 Hemlock.

**FINKELL HACHMEISTER CHEMICAL CO.,** 1910 Forbes Street.  
Tel. 1754 Grant.  
W. H. Finkell.

**FIRE EXTINGUISHER & SUPPLY CO.,** 1420 Spring Garden Avenue, N. S.  
Tel. 249 Cedar.  
T. F. Handly, S. M.

**FIRTH-STERLING STEEL CO.,** Demmler, Pa.  
Office, Oliver Building.  
Tel. 1574 Grant.  
T. B. Blood, P. A.  
James King, S. M.

**FISCHER, A. E. WAGON CO.,** 108 South Main Street.  
Tel. 187 Walnut.

**FISCHER FOUNDRY CO.,** South Fifteenth Street, S. S.  
Tel. 162 R Hemlock.

**FISCHER & MELLISH,** Phipps Power Building.  
Tel. 527 Court.

**FISHER, A. J. & CO.,** 436 Second Avenue.  
Tel. 4702 Court.

**FITZPATRICK, J. G. MFG. CO.,** 3109 Penn Avenue.  
Tel. 1132 Fisk.

**FLACCUS, C. L. GLASS CO.,** Tarentum, Pa.  
Office, Empire Building.  
Tel. 417 Court.  
A. Martin, S. M. and P. A.

**FLACCUS, WILLIAM, OAK LEATHER CO.,** 1228 River Avenue, N. S.  
Tel. 280 Cedar.

**FLANNERY BOLT CO.,** Bridgeville, Pa.  
Office, Vanadium Building.  
Tel. 2960 Schenley.  
J. R. Flannery, P. A.  
E. S. Ryce, S. M.

**FLEISCHMAN CO., THE,** 414 Penn Avenue.  
Tel. 60 Court.

**FLEMING TANK CO.,** 3115 Liberty Avenue.  
Tel. 373 Fisk.

**FLOCKER, JOHN CO., Ltd.,** 957 Liberty Avenue.  
Tel. 1370 Grant.

**FLUSH TANK METER CO.,** Hays Street and P. R. R., Wilkinsburg, Pa.  
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**FORSTER, J. C. & SON,** 2519 Penn Avenue.  
Tel. 757 Grant.

**FORT PITT BEDDING CO.,** Liverpool and Preble Avenues, N. S.  
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L. M. Sleeth, P. A.  
W. Wettmer, S. M.

**FORT PITT BRIDGE WORKS OF PGH.,** Canonsburg, Pa.  
Office, House Building.  
Tel. 2495 Court.  
George B. Schade, P. A.

**FORT PITT CHEMICAL CO.,** 202 South Highland Avenue.  
Tel. 1865 Hiland.

**FORT PITT FORGE CO.,** 26th Street and Liberty Avenue.  
Tel. 1504 Grant.

**FORT PITT LITHOGRAPHING CO.,** 701 Forbes Street.  
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T. J. O'Brien, P. A.  
J. S. Lanahan, S. M.

**FORT PITT OIL & PAINT CO.,** 3209 Liberty Avenue.  
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F. B. Yourison, Treas.

**FORT PITT SPRING & MFG. CO.,** McKees Rocks, Pa.  
Office, Farmers Bank Building.  
Tel. 121 Victor.

**FORT PITT STEEL CASTING CO.,** Houghton Ave., McKeesport, Pa.  
Tel. 1490 McKeesport.  
H. J. Koch, Sec.

**FORT PITT STONE & BRICK CO.,** Carnegie, Pa.  
Tel. 47 Carnegie.  
George T. Kirkbride.

**FORT PITT TYPE FOUNDRY,** 119 Shady Avenue.  
Tel. 358 Hiland.  
J. B. Siveter.

**FOX, JAMES T.,** 121 Wabash Avenue, W. E..  
Tel. 19 Walnut.

**FRANCIES, W. & J. CO.,** Edgewood, Pa.  
Tel. 308 Wilkins.

**FRANK PATTERN CO.,** 3021 Liberty Avenue.  
Tel. 402 L Fisk.

**FRANKLIN PARK FOUNDRY,** Herrs Island, Pittsburgh, Pa.  
Tel. 1776 Grant.

**FRANKLIN REFINING CO.,** 331 First Avenue.  
Tel. 186 Court.

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FRICK, H. C. COKE CO.,  
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## FRIED &amp; REINEMAN,

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Street, N. S.  
Tel. 511 Cedar.  
G. W. Meyers, P. A.

## FRIETSCH, CHARLES B. &amp; BRO.,

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Tel. 1124 L Cedar.

## FRUCHS INC. GAS LIGHT WORKS,

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Tel. 3193 Court.  
M. J. Fruchs, S. M. and P. A.

## FRY, H. C. GLASS CO.,

Rochester, Pa.  
Tel. 234 Rochester.  
J. H. Fry.

## FUHRER, A. G.,

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Tel. 950 L Fisk.

## FULLER, A. M. PASTE CO.,

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Tel. 846 Cedar.

## FULLER, WILLIAM H.,

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Chartiers Street, Washington, Pa.  
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B. E. Northrup, Supt.

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H. L. Collins, S. M.

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Imperial Power Building.  
Tel. 4347 Court.

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Tel. 1819 Cedar.  
W. E. Marquis, Sec.

## GILLESPIE MACHINE CO.,

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Tel. 1369 Court.

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S. B. Meyer.

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Tel. 1006 Grant.  
Albert Gloekler, S. M.  
Oscar Brashear, P. A.

## GOETTEL BROS.,

Stewart Avenue, Fair Haven, Pa.  
Tel. 130 L Carrick.

## GOETTMAN, O. J.,

525 East Ohio Street, N. S.  
Tel. 3624 Cedar.

## GOLD, CHARLES &amp; SON,

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Tel. 2746 J Cedar.

## GOLDEN-ANDERSON VALVE SPECIALTY CO.,

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Office, Fulton Building.  
Tel. 1256 Grant.

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C. W. Childish, S. M.

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Tel. 1229 Court.

## GRAESER MFG. CO.,

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Tel. 575 Grant.

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Office, 1317 West Carson Street.  
Tel. 175 Walnut.  
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Tel. 616 Cedar.

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Tel. 60 Jeannette.

**GREENSBURG SWING CO.,**  
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Tel. 213 W. Greensburg.

**GRIER BROS., Ltd.,**  
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Tel. 1373 Court.

**GRIFFITH'S CHARCOAL IRON CO.,**  
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**GRISWOLD WIRE CO.,**  
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**GROGAN CO.,**  
541 Wood Street.  
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**GROSSMAN, S. & CO.,**  
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Tel. 2420 Court.

**GULF REFINING CO.,**  
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Office, Empire Building.  
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Tel. 2645 Court.

**HALL STEAM PUMP CO.,**  
Grant Avenue, N. S.  
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H. D. Hildebrand, S. M.

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413 South Main Street.  
Tel. 44 J Walnut.

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Twenty-sixth Street and A. V. R. R.  
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Tel. 3764 R Grant.

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**HIGHLAND GLASS CO.,**  
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D. D. Kelley, Sec.

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Tel. 372 Court.  
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Tel. 1747 Court.  
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Tel. 813 Wilkins.

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Chartiers Valley Brewery,  
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American Brewery,  
Tel. 239 Fisk.  
Homestead Brewery,  
Tel. 87 J Homestead.  
Duquesne Brewery,  
Tel. 235 Hemlock.  
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Tel. 147 Victor.  
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**IRWIN FOUNDRY & MINE CAR CO.,**  
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Charles Bock, S. M.

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**JILES, JAMES & CO.,**  
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South Side (city),  
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Tel. 116 Hemlock.  
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Tel. 203 Court.  
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P. R. Kenny, S. M.

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Tel. 1017 New Brighton.

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H. P. Keck.

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M. H. Nolan, S. M.

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Mont. Murray, S. M.

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G. H. Francis, Mgr.

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Tel. 1826 Cedar.

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**KEYSTONE MACHINE CO.,**  
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M. V. Reynolds, Sec.

**KEYSTONE NUT LOCK MFG. CO.,**  
Vanadium Building.  
Tel. 2961 Schenley.

**KEYSTONE ORNAMENTAL IRON CO.,**  
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Tel. 205 Homestead.

**KEYSTONE PRINTING CO.,**  
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Tel. 427 Court.

**KEYSTONE SHEET METAL CO.,**  
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**KEYSTONE WIRE MATTING CO.,**  
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Tel. 3884 Grant.

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Tel. 7 Court.  
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Tel. 158 Court.

**KINGAN & CO.,**  
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Tel. 1825 Grant.

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Tel. 3733 Court.

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**KITTANNING IRON & STEEL MFG. CO.,**  
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Tel. 1290 Grant.  
Frank C. Neib, S. M.

**KITTANNING PLATE GLASS CO.,**  
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Tel. 49 Kittanning.

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Office, 513 Wood Street.  
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L. O. Kleber, P. A.

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Tel. 2855 R Grant.

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Robert R. Klein, S. M.

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Tel. 2232 R Hiland.

**KNORR, W. L.,**  
1108 Penn Avenue.  
Tel. 21 Grant.

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Tel. 2213 J Cedar.

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Tel. 1602 Grant.

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Tel. 394 Cedar.

**KUNKEL, H. F.,**  
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**LECHNITZKY, L. C.,**  
2011 Beaver Avenue, N. S.  
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**LEWIS FOUNDRY & MACHINE CO.,**  
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LIBERTY ELECTRIC MFG. CO.,  
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Tel. 2701 Court.  
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Tel. 3587 Hiland.

LIGGETT SPRING & AXLE CO.,  
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Tel. 195 R Hemlock.

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627 Jerome Street, McKeesport, Pa.  
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Pa.  
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LONG, WALTER MFG. CO.,  
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LORESCH BROS.,  
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Tel. 91 L Fisk.

LOYAL BURNER & MFG. CO.,  
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Tel. 4374 Court.

LUTZ & SCHRAMM CO.,  
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Jeannette, Pa.

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MACKINTOSH, HEMPHILL & CO.,  
Foot Twelfth Street.  
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MAMAUX AWNING & TENT CO.,  
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MANCHESTER, WILLIAM & CO.,  
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Tel. 823 Grant.

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Tel. 1828 Cedar.

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George T. Marshall.

MARSHALL FOUNDRY CO.,  
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**MAYER WAGON CO.,**  
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Tel. 4085 Hiland.

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2519 Smallman Street.  
Tel. 1060 Fisk.

**MERRIMAN, J. CO.,**  
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Tel. 52 R Beaver Falls.

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**METZ & MILLER,**  
813 Pennsylvania Avenue, N. S.  
Tel. 103 W Cedar

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Tel. 1135 Schenley.

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Tel. 223 Grant.

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**MILLER SAW TRIMMER CO.,**  
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**MILLER, WILLIAM & SONS CO.,**  
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Tel. 796 Grant.

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**MODERN HEATING CO.,**  
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Tel. 2566 Cedar.

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Tel. 145 R Monessen.

**MONESSEN FOUNDRY & MACHINE CO.,**  
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Tel. 37-3 Monongahela.

**MONONGAHELA FURNACE CO.,**  
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**MONONGAHELA MELTING CO.,**  
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**MONONGAHELA TUBE CO.,**  
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**MORGAN BROS.,**  
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Tel. 4790 Hiland.

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Tel. 202 Grant.

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Samuel Irvine.

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**McLEAN & McGINNESS,**  
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Tel. 446 Grant.

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**McDANIEL, R. B. CO.,**  
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Tel. 1017 Court.

**McGRAW, GEORGE W.,**  
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Tel. 503 Hemlock.

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Tel. 137 Duquesne.

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**McKEESPORT TIN PLATE CO.,**  
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Tel. 2264 Cedar.

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Tel. 2261 Court.

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**NICHOLSON & CO.,**  
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Tel. 3269 Court.  
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E. A. Douglas, P. A.

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Tel. 218 Cedar.  
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**O'LEARY, J. B.,**  
104 Flavel Street.  
Tel. 6582 Hiland.

**OLIVE STOVE WORKS,**  
Railroad Street, Rochester, Pa.  
Tel. 67 Rochester.  
Joseph M. Eakin, Pres.

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Tel. 843 Court.  
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Tel. 3942 Grant.

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Tel. 162 Court.  
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**PEERLESS CARBON BLACK CO.,**  
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**PENN AMERICAN PLATE GLASS CO.,**  
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**PENN BRIDGE CO.,**  
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Tel. 215 Court.

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30 Larimer Avenue.  
Tel. 2669 W Hiland.

**SCHAFFER, JOHN L. & BRO.,**  
Spring Garden Avenue, N. S.  
Tel. 2544 J Cedar.

**SCHEINMAN, I. L. CO.,**  
1018 Vickeroy Street.  
Tel. 1641 Grant.

**SCHNABEL, G. A. & SONS,**  
Penn Avenue and Thirty-first Street.  
Tel. 521 Fisk.

**SCHOEN STEEL WHEEL CO.,**  
McKees Rocks, Pa.  
(See Carnegie Steel Co.)

**SCHOLES BROS.,**  
1241 Reedsdale Street, N. S.  
Tel. 3246 Cedar.

**SCHULZE & EMANUEL,**  
613 Third Street, N. S.  
Tel. 243 Cedar.  
(Plant not operating.)

**SCHWARTZ, H.,**  
9 Stayton Street, N. S.  
Tel. 207 R Brady.

**SCHWERD, A. F. MFG. CO.,**  
145 McClure Street, N. S.  
Tel. 104 Brady.

**SCIENTIFIC MATERIALS CO.,**  
709 Forbes Street.  
Tel. 768 Grant.  
C. G. Fisher, S. M.

**SEAMAN-SLEETH CO.,**  
(Phoenix Roll Works)  
Forty-first Street and A. V. R. R.  
Tel. 478 Fisk.  
H. H. Meckley, Sec.

**SEILER, JOHN CO.,**  
Spring Garden Avenue, N. S.  
Tel. 2149 Cedar.

**SEAMLESS TUBE CO. OF AMERICA,**  
Monessen, Pa.  
Office, Frick Building.  
Tel. 72 Court.

**SEMMER, PHILLIP CO.,**  
401 Penn Avenue.  
Tel. 4709 Court.

**SEVERANCE MFG. CO.,**  
Glassport, Pa.  
Tel. 134 Glassport.

**SEWICKLEY ICE & SUPPLY CO.,**  
Sewickley, Pa.  
Tel. 552 J Sewickley.

**SEYBOLD, JOHN W.,**  
South Main Street, Washington, Pa.  
Tel. 407 L Washington.

**SHAMBERG & ALLEN,**  
First and Mill Streets, Coraopolis, Pa.  
Tel. 57 J Coraopolis.

**SHARPSBURG FOUNDRY CO.,**  
Sharpsburg, Pa.  
Tel. 264 Sharpsburg.

**SHAW & GWYER,**  
427 Fourth Avenue.  
Tel. 4184 Court.

**SHELBY STEEL TUBE CO.,**  
Elwood City, Pa.  
(See National Tube Co.)  
John J. Kennedy, S. M.

**SHENANGO MFG. CO.,**  
Fifty-first Street and A. V. R. R.  
Tel. 1131 Fisk.

**SHERWOOD BROS. CO.,**  
New Brighton, Pa.  
Tel. 1011 New Brighton.

**SIGWART & RALSTON,**  
Oak and Cherry Alleys.  
Tel. 1302 Grant.

**SILVERSTEIN, SAMUEL,**  
7127 Hamilton Avenue.  
Tel. 4846 Hiland.

**SIMMONS MFG. CO.,**  
Twenty-ninth Street and Liberty Avenue.  
Tel. 1396 Fisk.

**SIMONDS MFG. CO., THE,**  
Twenty-fifth Street and Liberty Avenue.  
Tel. 392 Grant.

**SIMONS, M. SONS,**  
Reliance and Anderson Streets, N. S.  
Tel. 18 Cedar.

**SIPE, JAMES B. & CO.,**  
516 Federal Street, N. S.  
Tel. 529 Cedar.  
R. E. Rodgers, S. M.

**SIPPEL, OTTO,**  
388 Bell Avenue, McKees Rocks, Pa.  
Tel. 84 L Victor.

**SISMOUR, FRANK,**  
884 Main Street, N. S.  
Tel. 744 L Cedar.

**SLATER, JOHN,**  
North Main Street, Washington, Pa.  
Tel. 187 J Washington.

**SMITH BROS. BRICK CO.,**  
Glenshaw, Pa.  
Office, Park Building.  
Tel. 3575 Grant.

**SMITH, P. C. & BRO.,**  
Corry & Hypolite Streets, N. S.  
Tel. 2456 R Cedar.

**SNIVELEY PLUMBING CO., THE,**  
5981 Center Avenue,  
Tel. 459 Hiland.

**SOMMERFELD MACHINE & MFG. CO.,**  
216 Second Avenue.  
Tel. 1127 Court.

**SOMMERFELD IRON & BRONZE CO.,**  
5639-49 Butler Street.  
Tel. 30 Fisk.  
John R. Keers, Pres.

**SORG MFG. CO., THE,**  
1733 Carson Street, S. S.  
Tel. 633 J Hemlock.

**SOSSONG, CHARLES B. CO.,**  
Bank Street Extension, Bridgeville, Pa.  
Tel. 129 J Bridgeville.

**SOUTH PITTSBURGH PATTERN CO.,**  
71 South Twentieth Street.  
Tel. 316 J Hemlock.  
Alfred Neale, Mgr.

**SPANG, CHALFANT & CO.,**  
Etna, Pa.  
Office, Union Bank Building.  
Tel. 770 Court.  
George Matheson, Jr., Gen. Mgr.

**SPRINGFIELD FOUNDRY CO.,**  
3215 Smallman Street.  
Tel. 130 Fisk.

**SQUIRREL HILL BRICK CO.,**  
Bristol near Bigelow Street.  
Tel. 4 Hazel.

**STAAB, G.,**  
54 Royal Street, N. S.  
Tel. 1932 L Cedar.

**STAM-PAUL & CO.,**  
122 Sixth Avenue, Homestead, Pa.  
Tel. 237 Homestead.

**STANDARD AUTOMOBILE CO.,**  
Grant Boulevard.  
Tel. 2440 Schenley.

**STANDARD BOX & LUMBER CO.,**  
Lincoln Avenue, Millvale, Pa.  
Tel. 25 Millvale.

**STANDARD BRIDGE TOOL CO.,**  
Bessemer Building.  
Tel. 1576 Court.

**STANDARD CHAIN CO.,**  
Braddock, Pa.  
Office, Third Avenue and Ross Street.  
Tel. 29 Court.  
S. A. Bond, P. A.  
C. M. Power, S. M.

**STANDARD ENGINEERING CO.,**  
Ellwood City, Pa.  
Tel. 25 Ellwood City.

**STANDARD GAUGE STEEL CO.,**  
First Avenue, Beaver Falls, Pa.  
Tel. 261 Beaver Falls.

**STANDARD HEATING & RADIATOR CO.,**  
Imperial Power Building.  
Tel. 4312 Court.

**STANDARD HORSE NAIL CO.,**  
Fifth Avenue, New Brighton, Pa.  
Tel. 1019 J New Brighton.

**STANDARD ICE CO.,**  
1362 River Avenue, N. S.  
Tel. 1221 Cedar.

**STANDARD LEATHER CO.,**  
296 Spring Garden Avenue, N. S.  
Tel. 260 Cedar.

**STANDARD MACHINE CO.,**  
809 Pennsylvania Avenue, N. S.  
Tel. 543 Cedar.

**STANDARD PATTERN CO.,**  
Twenty-eighth Street and Spruce Alley.  
Tel. 352 Fisk.  
George S. Burton, S. M.

**STANDARD PLATE GLASS CO.,**  
Butler, Pa.  
Tel. 9 Butler.

**STANDARD POWDER CO.,**  
Second National Bank Building.  
Tel. 1929 Grant.

**STANDARD SANITARY MFG. CO.,**  
Beaver Avenue, N. S.  
Office, Bessemer Building.  
L. C. Corbus, P. A.  
H. C. Clarke, S. M.

**STANDARD SCALE & SUPPLY CO.,**  
245 Water Street.  
Tel. 1210 Court.  
T. E. Barwick, P. A.  
George Entriken, S. M.

**STANDARD SHEET METAL MFG. CO.,**  
Washington, Pa.  
Tel. 1948 Court.

**STANDARD SIGN MFG. CO.,**  
4564 Penn Avenue.  
Tel. 891 Fisk.

**STANDARD SPECIALTY & TUBE CO.,**  
Penn Avenue, New Brighton, Pa.  
Tel. 1070 New Brighton.

**STANDARD STEEL BOX CO.,**  
Villers Avenue, Bridgeville, Pa.  
Tel. 82 Bridgeville.  
B. D. Foster, S. M.

**STANDARD STEEL CAR CO.,**  
Verona, Pa.  
Office, Frick Building.  
Tel. 1730 Court.

**STANDARD TIN PLATE CO.,**  
Canonsburg, Pa.  
Tel. 65 Canonsburg.

**STANDARD UNDERGROUND CABLE CO.,**  
Westinghouse Building.  
Tel. 635 Grant.  
E. L. McGrew, P. A.  
Charles W. Davis, S. M.

**STAR BREWING CO.,**  
South Main Street, Greensburg, Pa.  
Tel. 490 Greensburg.

**STAR ENAMELING & STAMPING CO.,**  
McKees Rocks, Pa.

**STAR ENCAUSTIC TILE CO.,**  
Bluff near Gist Street.  
Tel. 1015 Grant.  
J. C. Alrich, Pres.  
E. L. Wilson, S. M.

**STAR ORNAMENTAL IRON & WIRE WORKS,**  
2525 Frazier Street.  
Tel. 1938 Schenley.

**STEADMAN, F. R.,**  
808 Fifth Avenue, McKeesport, Pa.  
Tel. 193 McKeesport.

**STEEL CAR FORGE CO.,**  
Ellwood City, Pa.  
Office, Frick Building.  
Tel. 1730 Court.

**STEEL, E. T. & SONS,**  
1228 Irwin Avenue, N. S.  
Tel. 2507 Cedar.

**STEEL CITY ELECTRIC CO.,**  
1207 Columbus Avenue, N. S.  
Tel. 841 Brady.  
W. I. Patterson, P. A.

**STENDER COPPERSMITH CO., THE,**  
2932 Smallman Street.  
Tel. 873 Fisk.  
M. Schennerman, V. P.

**STENGEL BROS. CO.,**  
1508 Fifth Avenue.  
Tel. 3149 Grant.

**STEPHENSON MFG. CO.,**  
209 Sandusky Street, N. S.  
Tel. 1966 W Cedar.

**STERLING STEEL FOUNDRY CO.,**  
Braddock, Pa.  
Tel. 138 Braddock.  
D. B. Webb, P. A.  
G. J. Chandler, S. M.

**STERLING VARNISH CO.,**  
Fulton Building.  
Tel. 2979 Grant.  
H. C. Todd, S. M.

**STERRITT, THOMAS FOUNDRY CO.,**  
Thirty-second and Smallman Streets.  
Tel. 50 Fisk.  
H. P. Spilker, S. M.

**STEUP BROS.,**  
418 Walnut Street, Sewickley, Pa.  
Tel. 167 L Sewickley.

**STEVENSON & CO.,**  
Phipps Power Building.  
Tel. 763 Court.

**STEVENSON & FOSTER CO.,**  
947 Liberty Avenue.  
Tel. 1456 Grant.

**STEWART, JAMES C.,**  
83 South Thirteenth Street.  
Tel. 52 R Hemlock.

**STIFEL, CHARLES F. CO.,**  
(Phoenix Tannery,)  
Preble Avenue, N. S.  
Tel. 4037 Cedar.

**STOELTZING, F. C.,**  
South Fourth and Bingham Streets.  
Tel. 740 Hemlock.

**STONE ROUGH BOX & GRAVE STONE CO.,**  
935 East Ohio Street, N. S.  
Tel. 3044 J Cedar.

**STONER, THAW & CO.,**  
1200 West Carson Street.  
Tel. 98 Walnut.

**STOVE & RANGE CO. OF PITTSBURGH,**  
North Side.  
Office, Columbia Bank Building.  
Tel. 1900 Court.  
H. M. Baldwin, P. A.  
Charles W. Goodnough, S. M.

**STRUNZ, S. & SON,**  
708 Bingham Street, S. S.  
Tel. 23 Hemlock.

**STUCKY, WILLIAM A.,**  
623 Ivy Street.  
Tel. 5585 Hiland.

**STUPAKOFF LABORATORIES,**  
401 Amberson Avenue.  
Tel. 837 Schenley.  
S. H. Stupakoff.

## MANUFACTURERS

**SULLIVAN, C. L.,**  
217 South Euclid Avenue.  
Tel. 5103 Hiland.

**SULLIVAN MACHINERY CO.,**  
Farmers Bank Building.  
Tel. 2792 Grant.  
W. R. Jarvis, S. M.

**SUPERIOR MFG. CO.,**  
Magnolia Street, N. S.  
Tel. 2540 Cedar.  
Albert Miller.

**SUPERIOR STEEL CO.,**  
Carnegie, Pa.  
Tel. 24 Carnegie.

**SUYDAM, M. B. CO.,**  
Fifty-first and Butler Streets.  
Tel. 160 Fisk.  
M. B. Suydam, S. M.

**SWAIN & ANGEL CO.,**  
Thirty-first and Smallman Streets.  
Tel. 121 Fisk.

**SWEARINGEN, J. C. INK CO.,**  
222 Wick Street.  
Tel. 2894 Grant.  
F. C. Swearingen, Sec.

**TARENTUM GLASS CO.,**  
Tarentum, Pa.  
Tel. 16 Tarentum.

**TARENTUM PAPER MILL CO.,**  
Tarentum, Pa.  
Tel. 4 J Tarentum.  
R. Fred Douds, Sec.

**TATE, JONES & CO.,**  
Leetsdale, Pa.  
Office, Empire Building.  
Tel. 1351 Court.

**TAYLOR BURNER & ELECTRO PLATE CO.,**  
804 Duquesne Way.  
Tel. 1169 Grant.

**TAYLOR, T. F. PRINTING CO.,**  
108 Diamond Street.  
Tel. 3562 Court.

**TAYLOR-WILSON MFG. CO.,**  
Thompson Ave., McKees Rocks, Pa.  
Tel. 172 Victor.  
H. M. Wilson, Pres.

**TAYLOR & DEAN,**  
Penn Avenue and Twenty-fifth Street.  
Tel. 817 Grant.

**TERRACE MFG. CO.,**  
341 Sixth Avenue.  
Tel. 2395 Grant.

**TERHEYDEN, CHARLES, JR.,**  
530 Smithfield Street.  
Tel. 393 Grant.

**THERMO GAS BOILER CO.,**  
Imperial Power Building.  
Tel. 4312 Court.

**THOMPSON, E. J. CO.,**  
5919 Penn Avenue.  
Tel. 548 Schenley.

**THOMPSON & CO.,**  
1119 Galveston Avenue, N. S.  
Tel. 171 Cedar.  
L. C. Stuckrath, S. M.

**THOMPSON & CO.,**  
216 Penn Avenue.  
Tel. 3474 Court.

**TIBBEY BROS. GLASS CO.,**  
Main Street, Sharpsburg, Pa.  
Tel. 40 Sharpsburg,

**TILLINGHAST, D. B.,**  
McDonald, Pa.  
Tel. 15 J McDonald.

**TOTTEN, W. R.,**  
3604 Fifth Avenue.  
Tel. 2941 Schenley.

**TOWNSEND, C. C. & E. P.,**  
Fallston Street, New Brighton, Pa.  
Tel. 1009 J New Brighton.

**TRANTER MFG. CO.,**  
105 Water Street.  
Tel. 680 Court.

**TREADWELL CONSTRUCTION CO.,**  
Midland, Pa.  
Tel. 910 Rochester.

**TRETHEWAY, SAMUEL & CO.,**  
Fifty-seventh Street.  
Tel. 145 Fisk.  
W. R. Tinker, Sec.

**TRIMBUR & HIGHLEY,**  
Imperial Power Building.  
Tel. 4424 Court.

**TUBE CITY BREWING CO.,**  
Market Street, McKeesport, Pa.  
Tel. 1126 J McKeesport.

**TUCKEY BROS.,**  
4430 Howley Avenue.  
Tel. 840 J Fisk.

**TURNER, C. A., Inc.,**  
Third Street and Chancery Way.  
Tel. 7211 Court.

**TWEED & BOTSFORD,**  
1023 Forbes Street.  
Tel. 398 Grant.  
H. F. Botsford.

**TYLER TUBE & PIPE CO., THE,**  
Jefferson Avenue, Washington, Pa.  
Tel. 45 Washington.  
Charles B. Bumpus, Mgr.

**TYLER, W. S., CO.,**  
Coraopolis, Pa.  
Tel. 125 Coraopolis.  
H. C. Seipp.

**UNION DRAWN STEEL CO.,**  
801 Fulton Building.  
Tel. 1661 Grant.

**UNION FOUNDRY & MACHINE CO.,**  
West Carson Street.  
Tel. 144 Hemlock.  
F. H. Zimmers, S. M.

**UNION ICE CO.,**  
124 West Ohio Street, N. S.  
Tel. 2408 Cedar.

**UNION PAINT CO.,**  
South Avenue and B. & O. R. R., N. S.  
Tel. 2122 Cedar.

**UNION PAPER BOX CO.,**  
207 Sandusky Street, N. S.  
Tel. 343 W Cedar.

**UNION PAPER MILL CO.,**  
Railroad Street, Monongahela, Pa.  
Office, Diamond Bank Building.  
Tel. 1097 Court.  
E. H. Miller.

**UNION PRINTING CO.,**  
428 Fourth Avenue,  
Tel. 4602 Court.

**UNION SEWER PIPE CO.,**  
McKeesport, Pa.  
Tel. 1261 McKeesport.

**UNION SPRING & MFG. CO.,**  
New Kensington, Pa.  
Office, Oliver Building.  
Tel. 697 Grant.  
P. V. McKenna, P. A.  
L. G. Woods, S. M.

**UNION STEEL CASTING CO.,**  
Sixty-first and Butler Streets.  
Tel. 456 Fisk.  
H. C. Wickline, P. A.  
J. P. Allen, Sec.

**UNION STEEL CO.,**  
Donora, Pa.  
(See American Steel & Wire Co.)

**UNION SWITCH & SIGNAL CO.,**  
Swissvale, Pa.  
Tel. 890 Wilkins.  
W. Hadwallader.

**UNITED ENGINEERING & FOUNDRY CO.,**  
Farmers Bank Building.  
Tel. 1590 Grant.  
Charles A. Satler, Sec.

**UNITED STATES ALUMINUM CO.,**  
New Kensington, Pa.  
Office, Oliver Building.  
Tel. 4651 Grant.  
George R. Gibbons.

**UNITED STATES BOTTLERS SUPPLY CO.,**  
McKee Place.  
Tel. 2471 Schenley.

**UNITED STATES CASKET CO.,**  
1019 Liberty Avenue.  
Tel. 793 Grant.

**UNITED STATES COAL & COKE CO.,**  
Union Bank Building.  
Tel. 4427 Court.

**UNITED STATES GLASS CO.,**  
South Ninth and Bingham Streets, S. S.  
Tel. 715 Hemlock.  
H. W. Nickel.

**UNITED STATES SAFE CO.,**  
Elizabeth, Pa.  
Tel. 70 Elizabeth.  
E. P. Kennedy.

**UNITED STATES SANITARY MFG. CO.,**  
Monaca, Pa.  
Office, Arrott Building.  
Tel. 858 Court.  
O. K. Cline, P. A. and S. M.

**UNITED SUIT CASE CO.,**  
811 Fifth Avenue.  
Tel. 3621 J Grant.  
P. Kaufman, Mgr.

**UNIVERSAL FLEXIBLE PACKING CO.,**  
3109 Penn Avenue.  
Tel. 1030 Fisk.

**UNIVERSAL PORTLAND CEMENT CO.,**  
Universal, Pa.  
Office, Frick Building.  
Tel. 2413 Court.

**UNIVERSAL ROLLING MILL CO.,**  
Bridgeville, Pa.  
Tel. 35 Bridgeville.

**UREKA STEEL CO.,**  
Lowe and McKnight Streets.  
Tel. 82 Walnut.

**VALLEY FORGING CO.,**  
Railroad Street, Verona, Pa.  
Tel. 103 Oakmont.

**VALLEY ICE CO.,**  
East Third Street, Beaver Falls, Pa.  
Tel. 155 Beaver Falls.

**VANADIUM METALS CO.,**  
Vanadium Building.  
Tel. 2961 Schenley.  
J. Rodgers Flannery, S. M.

**VANPORT BRICK CO.,**  
Office, Farmers Bank Building.  
Tel. 526 Grant.

**VELTE FOUNDRY & MACHINE CO.,**  
Mars, Pa.  
Office, Fulton Building.  
Tel. 356 Grant.

**VERONA TOOL WORKS,**  
Verona, Pa.  
Office, Oliver Building.  
Tel. 402 Grant.

**VERSAILLES RAILWAY SIGNAL CO.,**  
Versailles, Pa.  
Office, 248 Fourth Avenue.  
Tel. 1090 Court.

**VICTOR SPRING BED CO.,**  
209 West Reliance Street, N. S.  
Tel. 2378 J Cedar.

**VIENNA PRESSED YEAST CO.,**  
1230 Penn Avenue.  
Tel. 1191 J Grant.

**VILSACK-MARTIN CO.,**  
3222 Penn Avenue.  
Tel. 90 Fisk.  
R. Martin.

**VITRO MFG. CO.,**  
Chartiers Avenue, 18th Ward.  
Office, Empire Building.  
Tel. 2369 Court.

## MANUFACTURERS

**VULCAN CRUCIBLE STEEL CO.,**  
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Tel. 37 Coraopolis.  
W. A. Campbell, Sec. and Treas.

**WADSWORTH STONE & PAVING CO.,**  
Lambert Street and P. R. R.  
Tel. 352 Hiland.  
W. C. Thoma, S. M.

**WAGNER CURTAIN STRETCHER MFG. CO.,**  
Potomac Street, Greensburg, Pa.  
Tel. 744 Greensburg.

**WALKER'S, A. SON,**  
Grant Boulevard.  
Tel. 2810 Grant.  
William J. Walker.

**WALKER, W. & H.,**  
Herrs Island.  
Tel. 1776 Grant.  
T. W. McHugh, P. A. and S. M.

**WALKER & SLATER,**  
West Wheeling Street, Washington, Pa.  
Tel. 95 Washington.

**WALKER & WILCOX,**  
5104 Penn Avenue.  
Tel. 2825 Hiland.

**WALL, P. MFG. CO.,**  
175 Preble Avenue, N. S.  
Tel. 138 Brady.

**WALSH, MORRIS SONS.**  
South Ninth and Sarah Streets.  
Tel. 163 Hemlock.  
Thomas E. Walsh, S. M.

**WALTER, GEORGE & SON,**  
South Washington Street, Butler, Pa.  
Tel. 54 Butler.

**WANGLER, C. S. & SON,**  
628 Third Street, N. S.  
Tel. 1466 Cedar.

**WARD BAKING CO.,**  
3100 Liberty Avenue.  
Tel. 494 Fisk.

**WARD, JOHN H. & SONS CO.,**  
Park & Nelson Streets.  
Tel. 916 Hiland.  
William R. Gracey.

**WARD, SAMUEL,**  
846 West North Avenue, N. S.  
Tel. 1969 J Cedar.

**WARNER GLASS CO.,**  
McDonald, Pa.  
(See Crescent Bottle Co.)

**WASHINGTON ICE CO.,**  
Chartiers Avenue, Washington, Pa.  
Tel. 120 J Washington.  
I. L. Jones, Mgr.

**WASHINGTON TIN PLATE CO.,**  
Washington, Pa.  
Office, Oliver Building.  
Tel. 764 Grant.  
J. J. O'Connor, P. A.  
H. J. Sallmeyer, Jr., S. M.

**WASSER, JOSEPH,**  
20 Townsend Street.  
Tel. 3588 J Grant.

**WATER DELIVERY CO.**  
1611 Liberty Avenue  
Tel. 830 Grant.  
Ebert M. Long, S. M.

**WATERPROOF CEMENT VAULT CO.,**  
South Nineteenth and Mary Streets.  
Tel. 607 J Hemlock.

**WATT MFG. CO.,**  
Reliance and Darrah Streets, N. S.  
Tel. 2374 Cedar.

**WAVERLY OIL WORKS CO.,**  
Fifty-fourth Street and A. V. R. R.  
Tel. 582 Fisk.  
George J. Willock.

**WAYNE BRASS FOUNDRY CO.,**  
134 Home Street,  
Tel. 982 Fisk.  
W. J. Davis, Pres.

**WEAVER SPECIALTY CO.,**  
117 Shady Avenue.  
Tel. 1144 Hiland.

**WEBER-ERICKSON BUNTING CO.,**  
221 Diamond Street.  
Tel. 823 Court.

**WEINMAN BROS.,**  
810 Southern Avenue, Mt. Washington.  
Tel. 411 Hill.

**WEIR, J. G. & SON,**  
1325 Liberty Avenue.  
Twenty-seventh and Smallman Streets.  
Etna, Pa.  
Tel. 143 Grant.

**WELLMAN, NORRIS M.,**  
811 Amity Street, Homestead, Pa.  
Tel. 287 J Homestead.

**WEST, C. & CO.,**  
420 Duquesne Way.  
Tel. 454 Court.

**WEST END STONE & BRICK CO.,**  
121 Wabash Avenue.  
Tel. 19 Walnut.

**WEST LEECHBURG SHEET & TIN PLATE CO.,**  
Leechburg, Pa.  
(See American Sheet & Tin Plate Co.)

**WEST LEECHBURG STEEL CO.,**  
Leechburg, Pa.  
Office, Farmers Bank Building.  
Tel. 2680 Grant.

**WEST LIBERTY IRON & WIRE WORKS,**  
753 Ensign Avenue.  
Tel. 923 Hill.

**WEST PENN STEEL CO.,**  
Brackenridge, Pa.  
Tel. 64 Tarentum.  
Ambrose Beard, S. M.  
Joel W. Burdick, Pres.

**WEST POINT BOILER WORKS,**  
Twenty-third and Smallman Streets.  
(See Munroe, R. & Son.)

**WESTERN PENNSYLVANIA MARBLE & GRANITE CO.,**  
4618 Penn Avenue.  
Tel. 247 Fisk.

**WESTERN TOOL & FORGE CO.,**  
Brackenridge, Pa.  
Tel. 9 Tarentum.  
H. A. Heller, Jr.

**WESTINGHOUSE AIR BRAKE CO.,**  
Wilmerding, Pa.  
Office, Westinghouse Building.  
Tel. 1314 Grant.  
W. A. Forrester, P. A.  
E. C. Craig, S. M.

**WESTINGHOUSE ELECTRIC & MFG. CO.,**  
East Pittsburgh, Pa.  
Office, Union Bank Building.  
Tel. 4141 Court.  
W. J. Longmore, P. A.  
W. F. Fowler, S. M.

**WESTINGHOUSE MACHINE CO.,**  
East Pittsburgh, Pa.  
Office, Westinghouse Building.  
Tel. 2443 Grant.  
A. W. Fullerton, P. A.  
H. Van Blarcom, S. M.

**WESTMORELAND BRICK CO.,**  
Office, Second National Bank Building.  
Tel. 2095 Grant.

**WETTACH & CO.,**  
270 Spring Garden Avenue, N. S.  
Tel. 1446 J Cedar.

**WHEELER, HENRY & SON,**  
119 West Ohio Street, N. S.  
Tel. 1883 Cedar.

**WHITE, SCOTT A.,**  
Lewis Building.  
Tel. 1624 Grant.

**WHYTE, JAMES,**  
2806 Penn Avenue.  
Tel. 94 R Fisk.

**WICKBORO MIRROR CO.**  
Kittanning, Pa.

**WIGMAN LUMBER CO.,**  
48 South Eighteenth Street.  
Tel. 158 Hemlock.

**WILCOX LIGHT CO.,**  
140 Fullerton Street.  
Tel. 3622 Grant.

**WILHELM, ROBERT W.,**  
Third and Liberty Avenues.  
Tel. 4504 Court.

**WILKINSBURG STAIR & MFG. CO.,**  
Penn Street, Wilkinsburg, Pa.  
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G. D. Glossner, Pres.

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309 Water Street.  
Tel. 1707 Court.

**KAHLE, B. T.,**  
326 Fourth Avenue.  
Tel. 2228 Court.

**KATZ, MAX & SON,**  
Water and Short Streets.  
Tel. 2678 Court.

**KELLY, GEORGE A. CO.,**  
Penn Avenue and Duquesne Way.  
Tel. 684 Grant.

**KELLER BROS.,**  
6347 Station Street.  
Tel. 1104 Hiland.

**KERR & SNODGRASS,**  
Isabella and Sandusky Streets.  
Tel. 2307 Cedar.

**KEYSTONE AUTOMOBILE CO.,**  
5905 Center Avenue.  
Tel. 1668 Hiland.

**KEYSTONE ELECTRIC TELEPHONE CO.,**  
614 Smithfield Street.  
Tel. 46 Grant.

**KEYSTONE LUMBER CO.,**  
South Seventeenth Street.  
Tel. 298 Hemlock.

**KEYSTONE WOODENWARE CO.,**  
806 Fifth Avenue.  
Tel. 2879 Grant.

**KINGSBACHER BROS.,**  
637 Liberty Avenue.  
Tel. 3552 Grant.

**KINGSBAKER, L. & CO.,**  
800 Penn Avenue.  
Tel. 1321 Grant.

**KIRK SUPPLY CO.,**  
Jenkins Arcade.  
Tel. 1844 Court.

**KLINE KAR MOTOR CO.,**  
3765 Grant Boulevard.  
Tel. 2986 Schenley.

**KNOEPP, LEWIS G.,**  
64 South Fourteenth Street.  
Tel. 54 Hemlock.

**KNOX, STROUSS & BRAGDON,**  
Juniata Street, N. S.  
Tel. 4038 Cedar.

**KOCH, CHARLES & CO.,**  
1021 Liberty Avenue.  
Tel. 1236 Grant.

**KEHLER, J. P. CO.,**  
2918 Penn Avenue.  
Tel. 818 Fisk.

**KOHNSTAMM, H. & CO.,**  
Third Street and Duquesne Way.  
Tel. 2615 Court.

**KOLB BROS. & HULSMAN CO.,**  
930 Penn Avenue.  
Tel. 2927 Grant.

**KOPP, G. L. & CO.,**  
704 Smithfield Street.  
Tel. 264 Grant.

**KRAMER, L.,**  
2638 Liberty Avenue.  
Tel. 903 Fisk.

**KURTZ, LANGBEIN & SWARTZ,**  
535 Wood Street.  
Tel. 279 Grant.

**LAIRD & TAYLOR CO.,**  
133 Seventh Street.  
Tel. 3295 Grant.

**LANG, H. J. SHOE CO.,**  
120 Seventh Street.  
Tel. 2939 Grant.

**LANDO, S. & CO.,**  
716 Penn Avenue.  
Tel. 2271 Grant.

**LARKIN CO. OF PENNA.,**  
Terminal Building.  
Tel. 617 Hemlock.

**LAZIER, JACOB,**  
2044 Webster Avenue.  
Tel. 2363 R Grant.

**LEARD, J. S.,**  
909 Penn Avenue.  
Tel. 3771 Grant.

**LEGGETT, WM. T. CO.,**  
2621 Liberty Avenue.  
Tel. 885 Fisk.

**LEHMAN, A. G. CO.,**  
811 South Canal Street, N. S.  
Tel. 2291 Cedar.

**LETSCH, F. J. & CO.,**  
422 First Street, N. S.  
Tel. 799 Cedar.

**LIBERTY MANTEL & TILE CO.,**  
6031 Broad Street.  
Tel. 563 Hiland.

**LINDSAY, JAMES C. HARDWARE CO.,**  
12 Eighth Street.  
Tel. 581 Grant.

**LIQUID CARBONIC CO.,**  
Winebiddle Avenue and P. R. R.  
Tel. 275 Hiland.

**LOCOMOBILE CO. OF AMERICA,**  
Euclid Avenue and Baum Street.  
Tel. 6900 Hiland.

**LOGAN-GREGG HARDWARE CO.,**  
Seventh Street.  
Tel. 725 Grant.

**LONG PIANO CO.,**  
Second Street and Liberty Avenue.  
Tel. 2953 Court.

**LUCAS, JOHN & CO.,**  
900 Second Avenue.  
Tel. 1769 Court.

**LYLE BROS.,**  
911 Penn Avenue.  
Tel. 3820 Grant.

**MACHINISTS SUPPLY CO.,**  
324 Third Avenue.  
Tel. 1580 Court.

**MACOMBER & WHYTE ROPE CO.,**  
422 First Avenue.  
Tel. 2940 Court.

**MAGINN, P. F. & CO.,**  
1025 Forbes Street.  
Tel. 2398 Grant.

**MALLINGER, SAMUEL,**  
Forbes and Gist Streets.  
Tel. 1813 Grant.

**MALONEY, T. J. IRON WORKS,**  
Twenty-ninth Street and A. V. R. R.  
Tel. 68 Fisk.

**MANCHESTER, WILLIAM & CO.,**  
3108 Smallman Street.  
Tel. 333 J Fisk.

**MANGANESE STEEL SAFE CO.,**  
941 Liberty Avenue.  
Tel. 382 Grant.

**MARIETTA CHAIR CO.,**  
1217 Liberty Avenue.  
Tel. 1882 Grant.

**MARINE MFG. & SUPPLY CO.,**  
35 Water Street.  
Tel. 1980 Court.

**MARS, A. L. & CO.,**  
1219 Clark Street.  
Tel. 2064 Grant.

**MARTIN, L. G.,**  
3923 Forbes Street.  
Tel. 1085 Schenley.

**MECHANICAL RUBBER CO.,**  
933 Liberty Avenue.  
Tel. 2696 Grant.

**MERCER RUBBER CO.,**  
220 Penn Avenue.  
Tel. 4217 Court.

**MERCER SHOE CO.,**  
132 Seventh Street.  
Tel. 1648 Grant.

**MERCHANTS & MANUFACTURERS PAPER CO.,**  
216 Third Avenue.  
Tel. 359 Court.

**MEYER, GEORGE E. CO.,**  
207 East Ohio Street, N. S.  
Tel. 1164 Cedar.

**MICHIGAN AUTOMOBILE CO.,**  
5937 Penn Avenue.  
Tel. 132 Hiland.

**MILLER-OWEN ELECTRIC CO.,**  
217 First Avenue.  
Tel. 1713 Court.

**MILLIKEN-SCHENCK CHINA CO.,**  
432 Penn Avenue.  
Tel. 1332 Court.

**MODERN WATER SUPPLY CO.,**  
210 Wood Street.  
Tel. 201 Court.

**MONARCH TYPEWRITER CO.,**  
102 Sixth Street.  
Tel. 1701 Court.

**MORGAN & WRIGHT,**  
933 Liberty Avenue.  
Tel. 2696 Grant.

**MOTOR TIRE REPAIR & SUPPLY CO.,**  
5918 Baum Street.  
Tel. 286 Hiland.

**MURPHY, JOHN & CO.,**  
622 Grant Street.  
Tel. 202 Grant.

**McABEE, E. B.,**  
910 Duquesne Way.  
Tel. 188 Grant.

**McALISTER BROS. MOTOR CAR CO.,**  
348 South Atlantic Avenue.  
Tel. 5564 Hiland.

**McCAFFREY, DANIEL SONS CO.,**  
716 Fifth Avenue.  
Tel. 1926 Grant.

**McCALOM, THOMAS & SONS,**  
910 Federal Street, N. S.  
Tel. 3069 Cedar.

**McCAUSLAND, W.,**  
321 Third Avenue.  
Tel. 1855 Court.

**McCLINTOCK, SPRAGUE, WILHELM CO.,**  
104 Market Street.  
Tel. 1983 Court.

**McCLOY, A. W. CO.,**  
642 Liberty Avenue.  
Tel. 1728 Grant.

**McCLURE CO.,**  
Terminal Building.  
Tel. 404 Hemlock.

**McCOMBS, WILLIAM P.,**  
2021 Carson Street.  
Tel. 780 Hemlock.

**McCRAY REFRIGERATOR CO.,**  
114 Market Street.  
Tel. 424 Court.

**McCULLOUGH, W. T. ELECTRIC CO.,**  
2315 Penn Avenue.  
Tel. 3657 Grant.

**McCURDY MAY CO.,**  
Center and Negley Avenues.  
Tel. 1420 Hiland.

**McDONNELL, J. P.,**  
86 South Twelfth Street.  
Tel. 273 W Hemlock.

**McDOUGALL, EDWARD,**  
108 Market Street.  
Tel. 3544 Court.

**McDOWELL & CO.,**  
Grant and Western Avenues, N. S.  
Tel. 1853 Cedar.

**McGINNIS-SMITH CO.,**  
217 Water Street.  
Tel. 1017 Court.

**McKEE, J. K. CO.,**  
444 Seventh Avenue.  
Tel. 1388 Grant.

**McGRAW, GEORGE W.,**  
Thirty-fourth Street and A. V. R. R.  
Tel. 23 Fisk.

**McKALLIP & CO.,**  
Peoples Bank Building.  
Tel. 3640 Court.

**MCLEAN & McGINNESS,**  
1427 Liberty Avenue.  
Tel. 446 Grant.

**McNULTY BROS. CO.,**  
Frick Building.  
Tel. 3318 Court.

**McNULTY, J. H. & BRO.,**  
616 Reedsdale Street, N. S.  
Tel. 2420 Cedar.

**NATIONAL MOTOR CAR CO.,**  
Baum and Beatty Streets.  
Tel. 2575 Hiland.

**NATIONAL SUPPLY CO.,**  
Twenty-third Street.  
Tel. 1514 Court.

**NEW YORK BELTING & PACKING CO.,**  
420 First Avenue.  
Tel. 2343 Court.

**NEW YORK WALL PAPER CO.,**  
207 Wood Street.  
Tel. 4523 Court.

OIL WELL SUPPLY CO.,  
213 Water Street.  
Tel. 3269 Court.

OCHILTREE, W. H. & CO.,  
416 Wood Street.  
Tel. 1700 Court.

OLIVER TYPEWRITER CO.,  
800 Penn Avenue.  
Tel. 384 Grant.

OSGOOD & SILVERBLATT,  
917 Fifth Avenue.  
Tel. 2693 Grant.

OTIS ELEVATOR CO.,  
Keenan Building.  
Tel. 34 Grant.

PACKARD MOTOR CAR CO.,  
Grant Boulevard.  
Tel. 2440 Schenley.

PAGE BELTING CO.,  
249 Water Street.  
Tel. 122 Court.

PAINTER-DUNN CO.,  
609 Neville Street.  
Tel. 2820 Schenley.

PHELAN, A. X.,  
372 North Craig Street.  
Tel. 202 Schenley.

PHILLIPS, J. & H.,  
627 Liberty Avenue.  
Tel. 441 Grant.

PIERCE-ARROW AUTOMOBILE CO.,  
Center and Negley Avenues.  
Tel. 1420 Hiland.

PIONEER MOTOR CAR CO.,  
Baum and Beatty Streets.  
Tel. 989 Hiland.

PITTSBURGH BAKERS & CONFECTIONERS SUPPLY CO.,  
1122 Penn Avenue.  
Tel. 2138 Grant.

PITTSBURGH BARREL & COOPERAGE CO.,  
51 Carson Street.  
Tel. 87 Hemlock.

PITTSBURGH BREWERS & BOTTLERS SUPPLY CO.,  
323 Fourth Avenue.  
Tel. 4736 Court.

PITTSBURGH BUTCHERS & PACKERS SUPPLY CO.,  
701 Spring Garden Avenue.  
Tel. 2054 Cedar.

PITTSBURGH-CHALMERS CO.,  
5914 Baum Street.  
Tel. 4 Hiland.

PITTSBURGH DRY GOODS CO.,  
935 Penn Avenue.  
Tel. 812 Grant.

PITTSBURGH GAS & ELECTRIC FIXTURE CO.,  
428 Penn Avenue.  
Tel. 89 Court.

PITTSBURGH HARNESS SUPPLY CO.,  
325 Penn Avenue.  
Tel. 2077 Court.

PITTSBURGH HAT FRAME CO.,  
618 Penn Avenue.  
Tel. 2959 Grant.

PITTSBURGH INTERSTATE CO.,  
5817 Penn Avenue.  
Tel. 1381 Hiland.

PITTSBURGH HIDE & TALLOW CO.,  
39 Spring Garden Avenue.  
Tel. 733 Cedar.

PITTSBURGH LEATHER & GLUE CO.,  
1500 Penn Avenue.  
Tel. 2066 Grant.

PITTSBURGH-MERCER AUTO CO.,  
Beatty and Mignonette Streets.  
Tel. 5179 Hiland.

PITTSBURGH MOULDING & PICTURE FRAME CO.,  
608 Fifth Avenue.  
Tel. 1544 Grant.

PITTSBURGH OFFICE & EQUIPMENT CO.,  
204 Wood Street,  
Tel. 128 Court.

PITTSBURGH PNEUMATIC CO., THE,  
7341 Hamilton Avenue.  
Tel. 6826 Hiland.  
C. F. Overly, S. M.

PITTSBURGH PUMP CO.,  
20 Fourth Street.  
Tel. 1326 Court.

PITTSBURGH RUBBER CO.,  
933 Liberty Avenue.  
Tel. 2696 Grant.

PITTSBURGH RUBBER SUPPLY CO.,  
725 Liberty Avenue.  
Tel. 3178 R Grant.

PITTSBURGH RUBBER & LEATHER CO.,  
1017 Liberty Avenue.  
Tel. 3064 Grant.

PITTSBURGH SANITARY MFG. SUPPLY CO.,  
525 Third Avenue.  
Tel. 492 Court.

PITTSBURGH STOVE SUPPLY CO.,  
619 Liberty Avenue.  
Tel. 3713 Grant.

PITTSBURGH WATCH & METAL CO.,  
720 Penn Avenue.  
Tel. 1188 Grant.

PITTSBURGH WATERPROOF CO.,  
435 Liberty Avenue.  
Tel. 28 Court.

PITTSBURGH WRINGER & SWEEPER CO.,  
619 Penn Avenue.  
Tel. 609 Grant.

PLESSET, P. B.,  
1312 Fifth Avenue.  
Tel. 3931 J Grant.

PLYMOUTH CORDAGE CO.,  
313 Water Street.  
Tel. 768 Court.

**POLLARD, F.,**  
949 Liberty Avenue.  
Tel. 3029 R Grant.

**PRATT & CADY CO.,**  
321 Third Avenue.  
Tel. 1855 Court.

**PRICE, JOHN McC. CO.,**  
430 Penn Avenue.  
Tel. 2155 Court.

**PULLMAN MOTOR CAR & LIVERY CO.,**  
210 South Highland Avenue.  
Tel. 6845 Hiland.

**QUAKER CITY RUBBER CO.,**  
207 Wood Street.  
Tel. 1585 Court.

**R. C. H. AUTO CO.,**  
5715 Penn Avenue.  
Tel. 2030 Hiland.

**RAUH BROS., & CO.,**  
951 Penn Avenue.  
Tel. 12 Grant.

**RAY, THOMAS K. CO.,**  
811 Penn Avenue.  
Tel. 66 Grant.

**RECTOR-PITTSBURGH LIGHTING & HEATING CO.,**  
426 Penn Avenue.  
Tel. 4389 Court.

**REGAL MOTOR CAR CO.,**  
5813 Penn Avenue.  
Tel. 3219 Hiland.

**REINEKE-WAGNER PUMP & SUPPLY CO.,**  
416 First Avenue.  
Tel. 2177 Court.

**REINEKE-WILSON CO.,**  
41 Terminal Way.  
Tel. 676 Hemlock.

**REMINGTON TYPEWRITER CO.,**  
102 Sixth Street.  
Tel. 1701 Court.

**RELIANCE HEATER & SUPPLY CO.,**  
3610 Fifth Avenue.  
Tel. 203 Schenley.

**REPUBLIC RUBBER CO. OF PITTSBURGH.**  
2 Wood Street.  
Tel. 303 Court.

**REVERE RUBBER CO.,**  
933 Liberty Avenue.  
Tel. 2096 Grant.

**REYMER & BROS., Inc.,**  
Forbes and Pride Streets.  
Tel. 4080 Grant.

**RICCORDINO, A.,**  
1010 Webster Avenue.  
Tel. 2379 Grant.

**RICHARDSON & CO.,**  
Bessemer Building.  
Tel. 893 Court.

**RIPP, A. & BRO.,**  
366 Soho Street.  
Tel. 2027 L Grant.

**ROBBINS ELECTRIC CO.,**  
830 Liberty Avenue.  
Tel. 660 Grant.

**ROEBLING, JOHN A. CO.,**  
Reliance and Sandusky Streets, N. S.  
Tel. 3180 Cedar.

**ROEDEL-BRAUN LEATHER CO.,**  
713 Grant Street.  
Tel. 2851 Grant.

**ROSE, S. M.,**  
938 Penn Avenue.  
Tel. 115 Grant.

**ROSENFIELD & CO.,**  
906 Fifth Avenue.  
Tel. 1209 R Grant.

**RUSSELL MACHINERY CO.,**  
Twenty-eighth Street.  
Tel. 169 Fisk.

**S. G. V. CARS,**  
Seventh Avenue and Grant Boulevard.  
Tel. 1341 Grant.

**SAGINAW SHOW CASE CO.,**  
723 Liberty Avenue.  
Tel. 2704 Grant.

**SALEM, MURRAY,**  
1105 Webster Avenue.  
Tel. 2958 R Grant.

**SCARBOROUGH & KLAUSS CO.,**  
3809 Fifth Avenue.  
Tel. 142 Schenley.

**SCHEIN & LASDAY,**  
820 Fifth Avenue.  
Tel. 3574 Grant.

**SCHENLEY AUTO CO.,**  
4614 Forbes Street.  
Tel. 610 Schenley.

**SCHIEREN, CHARLES A. CO.,**  
205 Wood Street.  
Tel. 3399 Court.

**SCHLELEIN, P. MACHINERY CO.,**  
32 West Park Way, N. S.,  
Tel. 708 Cedar.

**SCMID, W. G. & CO.,**  
111 Market Street.  
Tel. 1952 Court.

**SEAGER BROS.,**  
331 Water Street.  
Tel. 2913 Court.

**SECURITY STOVE & REPAIR CO.,**  
3608 Fifth Avenue.  
Tel. 2465 Schenley.

**SEELER ELEVATOR CO.,**  
618 Wylie Avenue.  
Tel. 53 Grant.

**SEELEY, L. P. CO.,**  
953 Liberty Avenue.  
Tel. 3567 Grant.

**SELDEN PITTSBURGH AUTOMOBILE CO.,**  
Ellsworth & College Avenues.  
Tel. 1501 Hiland.

**SHADYSIDE AUTOMOBILE CO.,**  
5989 Center Avenue.  
Tel. 3209 Hiland.

**SHEINBERG & WEISBERG,**  
1014 Fifth Avenue.  
Tel. 810 Grant.

**SHIPLEY-MASSINGHAM CO.,**  
917 Liberty Avenue.  
Tel. 958 Grant.

**SHOUB, JOHN,**  
Jarvella and Fremont Streets, N. S.  
Tel. 2041 Cedar.

**SINGER SEWING MACHINE CO.,**  
Empire Building.  
Tel. 515 Grant.

**SMITH, L. C. & BROS. TYPEWRIER CO.,**  
618 Penn Avenue.  
Tel. 2907 Grant.

**SMITH, L. H. WOODENWARE CO.,**  
8 Eighth Street.  
Tel. 515 Grant.

**SMITH-PREMIER TYPEWRITER CO.,**  
102 Sixth Street.  
Tel. 1701 Court.

**SOLOMON BROS.,**  
2028 Knox Street, N. S.  
Tel. 4052 Cedar.

**SOMER, FITLER & TODD CO.,**  
325 Water Street.  
Tel. 2061 Court.

**SPALDING, A. G. & BRO. CO.,**  
608 Wood Street.  
Tel. 1972 Grant.

**SPECK-MARSHALL CO.,**  
314 Second Avenue.  
Tel. 3730 Court.

**SPEER, M. B. & CO.,**  
515 Reedsdale Street, N. S.  
Tel. 2040 Cedar.

**SPEER, W. B.,**  
107 Carson Street.  
Tel. 503 Hemlock.

**SPELLMAN, M. J.,**  
5883 Ellsworth Ave.,  
Tel. 4309 J Hiland.

**SPORTSMAN'S SUPPLY CO.,**  
625 Liberty Avenue.  
Tel. 716 Grant.

**STANDARD AUTOMOBILE CO.,**  
Grant Boulevard.  
Tel. 2440 Schenley.

**STANDARD HEATING & RADIATOR CO.,**  
Penn Avenue and Third Street.  
Tel. 4312 Court.

**STANDARD MFG. CO.,**  
439 Water Street.  
Tel. 3645 Court.

**STANDARD WATER HEATER CO.,**  
Fourth Avenue and Wood Street.  
Tel. 390 Court.

**STANDARD SUPPLY & EQUIPMENT CO.,**  
1151 Liberty Avenue.  
Tel. 232 Grant.

**STATE AUTOMOBILE CO.,**  
Mignonette and Randolph Streets.  
Tel. 3504 Hiland.

**STEARNS, F. B. CO., THE,**  
Forbes Field.  
Tel. 9069 Schenley.

**STEARNS & FOSTER CO.,**  
Terminal Warehouse.  
Tel. 563 Hemlock.

**STEIN, NATHAN & CO.,**  
907 Fifth Avenue.  
Tel. 1219 Grant.

**STEINER & VŒGTLY HARDWARE CO.,**  
230 Diamond Street.  
Tel. 17 Court.

**STERLING SANITARY MFG. CO.,**  
1205 Liberty Avenue.  
Tel. 3627 Grant.

**STEVENS-DURYEA MOTOR CAR CO.,**  
5853 Baum Street.  
Tel. 960 Hiland.

**STEVENSON, GEORGE W. & CO.,**  
107 Water Street.  
Tel. 327 Court.

**STEVENSON & FOSTER CO.,**  
947 Liberty Avenue.  
Tel. 1456 Grant.

**STEWART BROS. & CO.,**  
945 Penn Avenue.  
Tel. 663 Grant.

**STIEREN, WILLIAM M. OPTICAL CO.,**  
Seventh Street.  
Tel. 899 Grant.

**STORY & CLARK PIANO CO.,**  
539 Wood Street.  
Tel. 2582 Grant.

**STUDEBAKER AUTOMOBILE CO.,**  
Forbes Field.  
Tel. 303 Schenley.

**SULLIVAN, C. L.,**  
217 South Euclid Avenue.  
Tel. 5103 Hiland.

**SUN CO., THE,**  
Twenty-seventh and Smallman Streets.  
Tel. 1074 Grant.

**SULLIVAN, EDWARD L. CO.,**  
226 First Avenue.  
Tel. 491 Court.

**SUSSMAN & ARNOLD,**  
800 Penn Avenue.  
Tel. 2852 Grant.

**TARNER BROS.,**  
First Avenue and Ross Street.  
Tel. 2857 Court.

**TETLEY, JOSEPH & CO.,**  
Terminal Warehouse.  
Tel. 631 Hemlock.

**TIM, JOHN W. & SON,**  
635 Penn Avenue.  
Tel. 2176 Grant.

**TRANTER MFG. CO.,**  
105 Water Street.  
Tel. 680 Court.

**TOTTEN, ALBERT S.,**  
213 Wood Street.  
Tel. 1046 Court.

**TURNER, C. A., Inc.,**  
Third Avenue and Chancery Way.  
Tel. 721 Court.

**TWIN CITY TILING CO.,**  
16 West North Avenue, N. S.  
Tel. 1422 Cedar.

**UNDERWOOD TYPEWRITER CO.,**  
641 Liberty Avenue.  
Tel. 428 Grant.

**UNION ELECTRIC CO.,**  
Terminal Way.  
Tel. 800 Hemlock.

**UNION MATCH CO.,**  
Terminal Way.  
Tel. 236 Hemlock.

**UNION MOTOR CAR CO.,**  
5940 Baum Street.  
Tel. 5505 Hiland.

**UNITED STATES CASH REGISTER EXCHANGE,**  
424 Penn Avenue.  
Tel. 4397 Court.

**UNITED STATES CASKET CO.,**  
1019 Liberty Avenue.  
Tel. 793 Grant.

**UNITED STATES RUBBER CO.,**  
933 Liberty Avenue.  
Tel. 2696 Grant.

**UNITED STATES TIRE CO.,**  
5927 Baum Street.  
Tel. 5670 Hiland.

**UNIVERSAL VACUUM CLEANER CO.,**  
719 Liberty Avenue.  
Tel. 1577 Grant.

**VANADIUM SALES CO.,**  
Vanadium Building.  
Tel. 2960 Schenley.

**VESTAL MOTOR CAR CO.,**  
5852 Baum Street.  
Tel. 960 Hiland.

**VORWERCK, PAUL,**  
1606 Beaver Avenue, N. S.  
Tel. 3445 J. Cedar.

**WABASH MANTEL & TILE CO.,**  
137 Steuben Street.  
Tel. 56 Walnut.

**WAGNER BROS.,**  
439 Liberty Avenue.  
Tel. 2542 Court.

**WAGNER ELECTRIC MFG. CO.,**  
422 First Avenue.  
Tel. 1798 Court.

**WAITE-MOFFITT SUPPLY CO.,**  
1633 Fifth Avenue.  
Tel. 1890 Grant.

**WALKER & WILCOX,**  
5104 Penn Avenue.  
Tel. 2825 Hiland.

**WARD BROS.,**  
80 Roberts Street.  
Tel. 2558 Grant.

**WARDEN & OXNARD,**  
Eighth Street and Duquesne Way.  
Tel. 777 Grant.

**WARNER INSTRUMENT CO.,**  
5940 Kirkwood Street.  
Tel. 1958 Hiland.

**WASHINGTON WASHING MACHINE & WRINGER REPAIR CO.,**  
130 Sixth Street.  
Tel. 2217 Court.

**WATER DELIVERY CO.,**  
1611 Liberty Avenue.  
Tel. S30 Grant.

**WATER PROOF CEMENT VAULT CO.,**  
South Nineteenth and Mary Streets.  
Tel. 607 J Hemlock.

**WEHN, GEORGE & SON CO.,**  
627 Penn Avenue.  
Tel. 3775 Grant.

**WEINMAN BROS.,**  
425 Liberty Avenue.  
Tel. 1110 Court.

**WELDIN, J. R. & CO.,**  
431 Wood Street.  
Tel. 112 Court.

**WEST PENN PAPER CO.,**  
Third Avenue and Ross Street.  
Tel. 1492 Court.

**WHANN LITHIA WATER CO.,**  
Terminal Building.  
Tel. 627 Hemlock.

**WHITE CO., THE,**  
Craig and Atherton Streets.  
Tel. 2957 Schenley.

**WHITE, JAMES,**  
916 Duquesne Way.  
Tel. 678 Grant.

**WHITE, SCOTT A.,**  
Oliver Building.  
Tel. 1624 Grant.

**WHITE SEWING MACHINE CO.,**  
122 Sixth Street.  
Tel. 4273 Court.

**WICKES BROS.,**  
Forty-fifth Street and A. V. R. R.  
Tel. 544 Fisk.

**WILCOX-GIBBS SEWING MACHINE CO.,**  
24 Fifth Street.  
Tel. 4640 Court.

**WILHELM, HENRY,**  
134 Tenth Street.  
Tel. 1855 Grant.

**WILLIAMS, J. A. & CO.,**  
533 Chatham Street.  
Tel. 358 Grant.

**WILLIAMS & CO.,**  
220 Penn Avenue.  
Tel. 2157 Court.

**WIMMER, WILLIAM F.,**  
521 First Avenue.  
Tel. 821 Court.

**WINGERT, ROBERT R. & CO.,**  
130 Collins Avenue.  
Tel. 3208 Hiland.

**WINTON MOTOR CAR CO., THE,**  
Baum and Beatty Streets.  
Tel. 400 Hiland.

**WØESSNER & WUNDERLEE,**  
826 Liberty Avenue.  
Tel. 913 Grant.

**WOLFF-LANE HARDWARE CO.,**  
105 Wood Street.  
Tel. 830 Court.

**WOLK BROS.,**  
909 Fifth Avenue.  
Tel. 1384 L Grant.

**WOLK, J. N. & CO.,**  
900 Fifth Avenue.  
Tel. 1389 Grant.

**WOODWARD & WANGER,**  
1000 Western Avenue, N. S.  
Tel. 467 W Brady.

**WOODWELL, JOSEPH CO.,**  
201 Wood Street.  
Tel. 1060 Court.

**WUERTHELE, GEORGE & SONS,**  
1724 East Street, N. S.  
Tel. 2528 J Cedar.

**WUERTHELE, WILLIAM,**  
418 Diamond Street.  
Tel. 1297 Court.

**WYCKOFF WOOD PIPE CO.,**  
Terminal Warehouse Building.  
Tel. 442 Hemlock.

**YAWMAN & ERBE MFG. CO.,**  
723 Liberty Avenue.  
Tel. 2554 Grant.

**YORK MFG. CO.,**  
337 Water Street.  
Tel. 2246 Court.

**YORK SAFE & LOCK CO.,**  
941 Liberty Avenue.  
Tel. 382 Grant.

**YOUNG, J. F. CO.,**  
Thirty-fourth Street and A. V. R. R.  
Tel. 23 Fisk.

**YOUNG-MAHOOD CO.,**  
Seventh Avenue and Grant Street.  
Tel. 2050 Grant.

**ZEBER, DANIEL W.,**  
108 Third Avenue.  
Tel. 419 Court.

**ZEUGSCHMIDT CIGAR CO.,**  
710 Wylye Avenue.  
Tel. 3410 Grant.



# COMMODITIES

## ACCUMULATORS, HYDRAULIC.

Garrison, A. Foundry Co.  
Lewis Foundry & Machine Co.  
Mackintosh-Hemphill Co.  
Mesta Machine Co.  
Taylor-Wilson Mfg. Co.  
United Engineering & Foundry Co.

## ACIDS.

Pennsylvania Salt Mfg. Co. (Sulphuric,  
Oil of Vitrol, Muriatic, Nitric and  
Mixed for high explosives.)

## ADJUSTERS, ELECTRIC LAMP.

Gem Mfg. Co.

## ADJUSTERS, BRAKE.

Westinghouse Air Brake Co.

## ADZES, BRIDGE.

American Axe & Tool Co.  
Hubbard & Co.

## ADZES, CARPENTERS'.

American Axe & Tool Co.  
Hubbard & Co.

## ADZES, COOPERS'.

American Axe & Tool Co.  
Hubbard & Co.

## ADZES, RAILROAD.

American Axe & Tool Co.  
Hubbard & Co.

## ADZES, SHIP.

American Axe & Tool Co.  
Hubbard & Co.

## AGITATORS, MINERS'.

Carroll-Porter Boiler & Tank Co.  
Rheam, S. B.  
Riter-Conley Mfg. Co.

## ALARMS, HIGH WATER.

Pittsburgh Gage & Supply Co.  
(For boilers.)

## ALARMS, LOW WATER.

Pittsburgh Gage & Supply Co.  
(For boilers.)  
Williams Gauge Co.

## ALE.

Independent Brewing Co.  
Liberty Brewing Co.  
Pittsburgh Brewing Co.

## ALLOYS, ALUMINUM.

Aluminum Company of America.

## ALLOYS, VANADIUM.

American Vanadium Co.

## ALTARS, CHURCH.

Kittanning Church Seating Co.

## ALUM.

Pennsylvania Salt Mfg. Co.  
(Porous, crystal and lump for filtering.)

## ALUMINA, PURE.

Pennsylvania Salt Mfg. Co.  
(For aluminum.)

## ALUMINA, SULPHATE.

Pennsylvania Salt Mfg. Co.

## ALUMINUM, GRANULATED.

Aluminum Company of America.

## ALUMINUM, INGOT.

Aluminum Company of America.

## ALUMINUM, SHEET.

Aluminum Company of America.

## ALUMINUM UTENSILS.

United States Aluminum Co.  
(Cooking.)

## ALUMINUM WIRE.

Aluminum Company of America.

## ALUMINUM WARE.

United States Aluminum Co.  
(For cooking and household.)

## AMMETERS, RECORDING.

Westinghouse Electric & Mfg. Co.

## AMMETERS, SWITCHBOARD.

Pittsburgh Electric & Machine Works.  
Westinghouse Electric & Mfg. Co.

## AMMONIA.

Chamberlain & Johnston.  
Marine Oil Co.  
Sanitary Chemical Co.  
Tweed & Botsford.

## ANCHORS, MASON'S, BRICK.

Buechle & Davis.  
Lanz, M. & Son.

## ANDIRONS, FIREPLACE.

Superior Mfg. Co. (In brass, bronze or  
black finish.)

## ANGLES, IRON AND STEEL.

Carnegie Steel Co.  
Eichleay, John Jr., Co.  
Jones & Laughlin Steel Co.  
Lockhart Iron & Steel Co.  
McCance Bros. Co. (Galvanized.)  
Oliver Iron & Steel Co.  
Republic Iron & Steel Co.

## ANNUNCIATORS, AUTOMATIC GAS.

Butler Mfg. Co.

## ANTIMONY.

Pittsburgh White Metal Co.

## ANVILS, HAMMER.

Garrison, A. Foundry Co.

## ANVILS, PLOW.

Iron City Tool Works.

## APPARATUS, EXPERIMENTAL.

Doubleday-Hill Electric Co. (Electric.)

## APPARATUS, FIRE.

Weir, James G. & Son.

## APPARATUS, HEATING, HOT BLAST.

Westinghouse Electric & Mfg. Co.

**APPARATUS, HEATING, STEAM AND HOT WATER.**

Stender Coppersmith Co., The.

**APPARATUS, LABORATORY.**

Scientific Materials Co.

**APPARATUS, RAILWAY, ELECTRIC.**

Westinghouse Electric &amp; Mfg. Co.

**APPARATUS, TELEGRAPH, WIRELESS.**

Edgecomb Pyle Wireless Co.

**APPARATUS, THAWING, ELECTRIC.**Pittsburgh Transformer Co.  
Westinghouse Electric & Mfg. Co.**APPARATUS, WATER DISTILLING, COPPER.**

Stender Coppersmith Co., The.

**APPLIANCES, FUEL OIL BURNING.**

Tate-Jones &amp; Co.

**APPLIANCES, GAS.**

Equitable Meter Co.

**APRONS, CARPENTERS'.**

Pittsburgh Awning Co.

**APRONS FOR WOMEN.**Pittsburgh Dry Goods Co.  
Sorg Mfg. Co., The.**APRONS, POTTERS'.**

Pittsburgh Awning Co.

**ARBORS, SAW.**

Crucible Steel Co.

**ARCHES, CORRUGATED.**

Scaife, William B., &amp; Son.

**ARMATURES, ELECTRIC.**Doubleday-Hill Electric Co.  
Pittsburgh Armature Works.  
Westinghouse Electric & Mfg. Co.**ARMS, CROSS, ELECTRIC POLE.**

McDowell Mfg. Co.

**ASPHALT, REFINERS'.**

Gulf Refining Co.

**AUGERS, BORING MACHINE.**

Hubbard &amp; Co.

**AUGERS, BREAST.**Hubbard & Co.  
Iron City Tool Works.**AUGERS, COAL.**

Hubbard &amp; Co.

**AUGERS, TWIST.**

Hubbard &amp; Co.

**AUTOMATONS, MECHANIC**Becker & Kiesewetter.  
(For stores and show siness.)**AUTOMOBILES, GASOLINE.**Duquesne Motor Car Co.  
(Touring and limousine.)  
Eagle Tool & Machine Co.  
(Rebuilders of.)  
Parr Wagon Co.  
(Commercial.)  
Lange Motor Car Co.**AWNINGS, CORRUGATED IRON AND STEEL.**

Scaife, William B. &amp; Son.

**AWNINGS, WATERPROOF.**Brown & Co.  
Brown, W. S. & Co.  
Chapman, A. B.  
Dreesen, William.  
Liberty Awning Co.  
Mamaux Awning & Tent Co.  
Pittsburgh Awning Co.**AXES, STONE WORKERS'.**American Axe & Tool Co.  
Buechel & Davis.  
Hubbard & Co.  
Iron City Tool Works.  
Klein Logan Co.**AXES, ALL KINDS.**

American Axe &amp; Tool Co.

**AXLES, AUTOMOBILE.**Liggett Spring & Axle Co.  
Pennsylvania Casting & Machine Co.  
Vanadium Metals Co.  
(Bronze.)**AXLES, CAR.**Carbon Steel Co.  
Gillespie Mfg. Co.  
(Small.)  
Liggett Spring & Axle Co.  
(Mine.)  
Pittsburgh Forge & Iron Co.**AXLES, CARRIAGE.**Crucible Steel Co.  
Liggett Spring & Axle Co.  
Pennsylvania Casting & Machine Co.**AXLES, FRONT.**

Western Tool &amp; Forge Co.

**AXLES, LOCOMOTIVE.**Carbon Steel Co.  
Pennsylvania Casting & Machine Co.  
Pittsburgh Forge & Iron Co.**AXLES, SPECIAL.**Liggett Spring & Axle Co.  
Pennsylvania Casting & Machine Co.**AXLES, STEEL.**Carbon Steel Co.  
(Nickel.)  
Carnegie Steel Co.  
Jones & Laughlin Steel Co.  
(Cold rolled.)  
Pennsylvania Casting & Machine Co.**AXLES, TRUCK.**Carbon Steel Co.  
Pennsylvania Casting & Machine Co.**AXLES, VEHICLE.**Crucible Steel Co.  
Liggett Spring & Axle Co.  
Pennsylvania Casting & Machine Co.**AXLES, WAGON.**Crucible Steel Co.  
Keystone Axle Works.  
Liggett Spring & Axle Co.  
Pennsylvania Casting & Machine Co.**BABBITT METAL.**Damascus Bronze Co.  
National Lead & Oil Co.  
Pittsburgh Smelting & Refining Co.**BACTERICIDES, CARBONOL.**

Barrett Mfg. Co.

**BACTERICIDES, CREONOID.**

Barrett Mfg. Co.

**BACTERICIDES, PYXOL.** Barrett Mfg. Co.

**BACTERICIDES, TAROLA.** Barrett Mfg. Co.

**BADGES, METAL.** Matthews, James H. & Co.  
Pannier Stamp Co.  
(Detectives, Firemen, Police and Identification.)

**BAGS, CANVAS.** Dreesen, William.

**BAGS, PAPER.** Griswold, William A.  
Tarentum Paper Mills.  
(Cement and flour.)  
Union Paper Mill Co.

**BAGS, TRAVELING.** Boyd, Boyd & Boyd Trunk Co.  
(All kinds.)  
Capitol Trunk & Bag Co.  
Emergency Trunk & Bag Co.  
Grossman, L. A. & Co.

**BAKERIES.** Baur Bros.  
Caplan Baking Co.  
Famous Biscuit Co.  
Mackey, Thos. R. Baking Co.  
National Biscuit Co.  
Ward Baking Co.

**BALLAST, RAILROAD.** Jones-Evan & Co.

**BALLS, BOWLING.** Wutherle, George & Son.

**BALLS, CORK.** Armstrong Cork Co.

**BALLS, FULLER.** Pennsylvania Rubber Co.

**BALLS, GLASS.** Wormser Glass Co.

**BALLS FOR VALVE SEATS.** Evans Mfg. Co., The.

**BALLS, PIPE.** Cyclops Foundry Co.  
Pittsburgh Iron & Steel Foundries Co.

**BALLS, STEEL, FORGED.** Western Tool & Forge Co.

**BALLS, UNIVERSAL.** Albee, Chester B., Iron Works.

**BALLS, WEIGHT.** Pittsburgh Block & Mfg. Co.

**BALUSTERS, PORCH, WOOD.** Commercial Sash & Door Co.

**BANDAGES, SUSPENSORY.** Feick Bros. Co.

**BANDS, BOX.** American Steel Band Co.

**BANDS, HEADING.** American Steel Band Co.

**BANDS, HOOP FOR CONCRETE REINFORCING.** Electric Welding Co.

**BANDS, PILE.** Pittsburgh Block & Mfg. Co.

**BANDS, PIPE.** Kelly & Jones Mfg. Co.

**BANDS, SAW, RUBBER.** Pennsylvania Rubber Co.

**BANDS, SHINGLE.** American Steel Band Co.  
Karns Mfg. Co.

**BANDS, STEEL.** American Steel Band Co. (Special.)  
Booth, J. B. & Co.  
Carnegie Steel Co.  
Canonsburg Iron & Steel Co.  
Emerson Smith & Co. (Automobile.)  
West Leechburg Steel Co.

**BARGES, IRON AND STEEL.** American Bridge Co.  
Des Moines Bridge & Iron Co.  
Dravosburg Dock Co.  
McClintic-Marshall Construction Co.  
Riter-Conley Mfg. Co.

**BARGES, WOOD.** Hazelwood Dock Co.  
Neville Dock Co.  
Dravosburg Dock Co.

**BAROMETERS.** Brashear, John A. Co.

**BARRELS, RUMBLING AND TUMBLING.** McCormack, J. S. Co.

**BARRELS, STEEL.** Scaife, William B. & Son. (Cyanide, oil, steel.)

**BARRELS, WOOD.** Bell, The Edwin Co. (For flour, lime, glass, cement, salt, sugar and apples.)  
Walsh, Morris Sons. (For flour, sugar, cement, salt, fruit, lime, glass, crockery, chemicals, crackers.)

**BARRELS, WOOD HALF.** Walsh, Morris Sons.

**BARRELS, WORKING, FOR OIL WELLS.** Evans Mfg. Co., The.

**BARROWS, BAGGAGE.** Standard Scale & Supply Co.

**BARROWS, BRICK.** Penn Wheelbarrow Co.

**BARROWS, COKE.** Standard Scale & Supply Co.

**BARROWS, FOUNDRY.** Standard Scale & Supply Co.

**BARROWS, MORTAR.** Penn Wheelbarrow Co.

**BARROWS, RAILROAD.** Penn Wheelbarrow Co.

**BARROWS, SAND.** Penn Wheelbarrow Co.

**BARROWS, STEEL TRAY.** Penn Wheelbarrow Co.

**BARROWS, STONE.** Penn Wheelbarrow Co.

**BARROWS, WHEEL.**

Penn Wheelbarrow Co.  
Standard Scale & Supply Co.

**BAR IRON.**

Pittsburgh Forge & Iron Co.  
Lockhart Iron & Steel Co.  
National Tube Co.  
Republic Iron & Steel Co.  
Standard Chain Co.  
Monongahela Iron & Steel Co.  
Booth, J. B. & Co.  
Zug Iron & Steel Co.

**BAR, MUCK.**

Kittanning Iron & Steel Co.  
Spang, Chalfant & Co.

**BAR STEEL.**

Allegheny Steel Co.  
American Bridge Co.  
Booth, J. B. & Co.  
Bræburn Steel Co.  
Carnegie Steel Co.  
Colonial Steel Co.  
Crucible Steel Co.  
Damascus Tool Steel Co.  
Eichleay, John Jr., Co.  
Jones & Laughlin Steel Co.  
Kidd Bros. & Burgher Steel Wire Co.  
Lockhart Iron & Steel Co.  
Republic Iron & Steel Co.  
Union Drawn Steel Co.  
Vulcan Crucible Steel Co.  
West Penn Steel Co.  
Zug Iron & Steel Co.

**BARS, ALUMINUM.**

Aluminum Co. of America.

**BARS, ARCH.**

Carnegie Steel Co.  
Pittsburgh Forge & Iron Co.

**BARS, BEVEL.**

Lockhart Iron & Steel Co.

**BARS, CARPENTERS'.**

Iron City Tool Works.

**BARS, CHROME NICKEL STEEL.**

Kidd Bros. & Burgher Steel Wire Co.

**BARS, CHROME VANADIUM STEEL.**

Kidd Bros. & Burgher Steel Wire Co.

**BARS, CLAW.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.  
Verona Tool Works.

**BARS, COMMUTATOR.**

Crucible Steel Co.  
Westinghouse Electric & Mfg. Co.

**BARS, CONCRETE REINFORCEMENT.**

Carnegie Steel Co.  
Electric Welding Co. (Spacing and  
loose bent.)  
Kidd Bros. & Burgher Steel Wire Co.  
Jones & Laughlin Steel Co.

**BARS, CONNECTING, FOR SHAKING  
GRATES.**

Dixon, Charles E. & Son.

**BARS, COPPER.**

Crucible Steel Co.  
Pittsburgh Steel Mfg. Co.

**BARS, CROW.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.  
Verona Tool Works.

**BARS, CUPOLA TAPPING.**

Iron City Tool Works.

**BARS, DIGGING.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Lanz, M. & Son.  
Oliver Iron & Steel Co.  
Pittsburgh Shovel Co.

**BARS, DIGGING AND TAMPING.**

Hubbard & Co.  
Iron City Tool Works.  
Oliver Iron & Steel Co.

**BARS, DOLLY.**

Iron City Tool Works.

**BARS, EYE.**

Carnegie Steel Co.

**BARS, FINGER, COLD ROLLED STEEL.**

Jones & Laughlin Steel Co.

**BARS, FLAGGING.**

Hubbard & Co.  
Klein-Logan Co.  
Iron City Tool Works.  
Oliver Iron & Steel Co.

**BARS, GRATE.**

Pittsburgh Valve Foundry & Const. Co.

**BARS, JAIL.**

Colonial Steel Co.

**BARS, LINING.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.  
Pittsburgh Shovel Co.  
Verona Tool Works.

**BARS, LOOSE BENT AND SPACING, FOR  
CONCRETE REINFORCEMENT.**

Electric Welding Co.

**BARS, MINE.**

Hubbard & Co.  
Iron City Tool Works.

**BARS, NICKEL STEEL, COLD DRAWN  
AND CHROME.**

Kidd Bros. & Burgher Steel Wire Co.

**BARS, PAVING.**

Hubbard & Co.  
Iron City Tool Works.

**BARS, PINCH.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.  
Verona Tool Works.

**BARS, POST HOLE DIGGER.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.  
Pittsburgh Shovel Co.  
Verona Tool Works.

**BARS, SCREEN.**

Oliver Iron & Steel Co.

**BARS, SCREW STOCK, COLD DRAWN  
BRIGHT, FLAT OR SQUARE.**

Kidd Bros. & Burgher Steel Wire Co.

**BARS, SHACKLE.**

Hubbard & Co.  
Iron City Tool Works.  
Verona Tool Works.

**BARS, SPACING AND LOOSE BENT, FOR  
CONCRETE REINFORCING.**

Electric Welding Co.

**BARS, SPIKE.**

Hubbard & Co.  
Iron City Tool Works.

**BARS, SPLICE.**

Carnegie Steel Co.  
Pittsburgh Forge & Iron Co.

**BARS, TAMPING.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.  
Pittsburgh Shovel Co.  
Pittsburgh Steel Mfg. Co.  
Verona Tool Works.

**BARS, TEE.**

Carnegie Steel Co.  
Lockhart Iron & Steel Co.  
Republic Iron & Steel Co.

**BARS, TIMBER.**

Iron City Tool Works.

**BARS, TIN PLATE.**

Republic Iron & Steel Co.

**BARS, U.**

Republic Iron & Steel Co.

**BARS, ZEE.**

Carnegie Steel Co.

**BARS, HIGH GRADE STANDARD TOOL  
STEEL OF STANDARD SHAPES.**

Vulcan Crucible Steel Co.

**BASES, OIL CUP.**

Pittsburgh Gage & Supply Co.  
(“White Star.”)

**BASES, TROLLEY.**

Nuttall, R. D. Co.  
Union Electric Co.

**BASKETS, BUSHEL.**

Marnhout, D.  
Steel, E. T. & Sons.

**BASKETS, CANDY.**

Steel, E. T. & Sons.

**BASKETS, CLOTHES.**

Marnhout, D.  
Steel E. T. & Sons.

**BASKETS, COLORED.**

Marnhout, D.  
Steel, E. T. & Sons.

**BASKETS, DELIVERY.**

Steel, E. T. & Sons.

**BASKETS, DISPLAY.**

Marnhout, D.  
Steel, E. T. & Sons.

**BASKETS, DROP HANDLE.**

Marnhout, D.  
Steel, E. T. & Sons.

**BASKETS, FRUIT.**

Marnhout, D.  
Steel, E. T. & Sons.

**BASKETS, JAPANNED DINNER.**

Pittsburgh Tinware & Mfg. Co.

**BASKETS, LAUNDRY.**

Marnhout, D.  
Steel, E. T. & Sons.

**BASKETS, MARKET.**

Marnhout, D.  
Steel, E. T. & Sons.

**BASKETS, PORTABLE, FOR COAL OR  
WOOD.**

Superior Mfg. Co. (In black, japanned,  
bronze or brass.)

**BASKETS, SATCHEL.**

Marnhout, D.  
Steel, E. T. & Sons.

**BASKETS, SHIPPING.**

Steel, E. T. & Sons.

**BASKETS, STRAW.**

Marnhout, D.

**BASKETS, TOWEL.**

Standard Sanitary Mfg. Co.

**BASKETS, WASTE.**

Marnhout, D.  
Steel, E. T. & Son.

**BASKETS, WILLOW.**

Marnhout, D.

**BATHS, BIRD.**

Cooperative Flint Glass Co.

**BATHS, CHILD'S.**

Standard Sanitary Mfg. Co.

**BATHS, CORNER.**

Standard Sanitary Mfg. Co.

**BATHS, FOOT, ENAMELED OVAL.**

Dunlap, John Co.  
Standard Sanitary Mfg. Co.

**BATHS, HOSPITAL.**

Iron City Sanitary Mfg. Co.  
Standard Sanitary Mfg. Co.

**BATHS, LEGLESS.**

Standard Sanitary Mfg. Co.

**BATHS, NEEDLE.**

Standard Sanitary Mfg. Co.

**BATHS, RECESS.**

Standard Sanitary Mfg. Co.

**BATHS, REGULAR, ON FEET OR BASE.**

Standard Sanitary Mfg. Co.  
United States Sanitary Mfg. Co.

**BATHS, SHOWER.**

Standard Sanitary Mfg. Co.

**BATHS, SITZ.**

Standard Sanitary Mfg. Co.

**BATTERIES, ELECTRIC.**

Union Electric Co.  
Westinghouse Electric & Mfg. Co.

**BEAMS, BRAKE.**

Pressed Steel Car Co.  
Standard Steel Car Co.

**BEAMS, HOPPER.**

Standard Scale & Supply Co.

**BEAMS, I.**

Western Tool & Forge Co.

**BEAMS, IRON.**

Carnegie Steel Co.  
Eichleay, John Jr., Co.  
Jones & Laughlin Steel Co.  
Lanz, M. & Son.  
Republic Iron & Steel Co.  
Scaife, William B. & Son.

**BEAMS, PLOW.**

Republic Iron & Steel Co.

**BEAMS, STEEL.**

Carnegie Steel Co.  
Eichleay, John Jr., Co.  
Jones & Laughlin Steel Co.  
Republic Iron & Steel Co.

**BEAMS, STRUCTURAL STEEL.**

Carnegie Steel Co.  
Jones & Laughlin Steel Co.  
McClintic-Marshall Construction Co.

**BEARINGS, BALL.**

Keystone Machine Co.

**BEARINGS, BRONZE, AUTOMOBILE ROLLER.**

Vanadium Metals Co.

**BEARINGS, BRONZE.**

Lawrenceville Bronze Co.  
Pittsburgh White Metal Co.

**BEARINGS, ELECTRIC RAILWAY.**

Damascus Bronze Co.  
Westinghouse Electric & Mfg. Co.

**BEARINGS, JOURNAL.**

Keystone Bronze Co.

**BEARINGS, METAL.**

Lawrenceville Bronze Co.

**BEARINGS, MILL.**

Damascus Bronze Co.  
Keystone Bronze Co.

**BEARINGS, RAILROAD.**

Damascus Bronze Co.

**BEARINGS, RECESSED AND CLOSED END.**

Jones & Laughlin Steel Co.

**BEARINGS, RING OILING.**

Jones & Laughlin Steel Co.

**BEARINGS, STATIONARY ENGINE.**

Damascus Bronze Co.

**BEATERS, CARPET.**

Kress, George R. Co.

**BEDS, BRASS.**

Pittsburgh-Hickson Co.  
Pittsburgh Metal Bed Co.

**BEDS, CABINET.**

Fort Pitt Bedding Co.

**BEDS, BOX SPRING.**

Logan, A. J. Co.

**BEDS, COOLING.**

Garrison, A. Foundry Co.  
Mesta Machine Co.

**BEDS, HOT.**

Garrison, A. Foundry Co.  
Mesta Machine Co.  
Taylor-Wilson Mfg. Co.

**BEDS, IRON.**

Pittsburgh-Hickson Co.

**BEDS, IRON FOLDING.**

Diamond Mattress Co.  
Pittsburgh Iron Folding Bed Co.

**BEDS, MALLEABLE IRON.**

Pittsburgh Metal Bed Co.

**BEDS, SPRING.**

Diamond Mattress Co.  
Duquesne Bedding Co.  
Gross, H. E. & Co.  
Logan, A. J. Co. (Spiral).  
Pittsburgh Metal Bed Co.  
Victor Spring Bed Co.

**BEDS, STEEL, FOLDING.**

Victor Spring Bed Co.

**BEDS, STRAIGHTENING.**

Taylor-Wilson Mfg. Co.

**BEDS, WOVEN WIRE.**

Logan, A. J. Co.

**BEDSTEADS, BRASS.**

Pittsburgh Metal Bed Co.

**BEDSTEADS, HOSPITAL.**

Logan, A. J. Co.

**BEDSTEADS, INSTITUTION.**

Logan, A. J. Co.

**BEDSTEADS, MALLEABLE IRON.**

Pittsburgh Metal Bed Co.

**BEER.**

Anchor Brewing Co.  
Crescent Brewing Co.  
Independent Brewing Co. (Affiliated companies.)  
Liberty Brewing Co.  
Pittsburgh Brewing Co. (Affiliated companies.)  
Star Brewing Co.  
Tube City Brewing Co.

**BELLS, CAR.**

Wall, P. Mfg. Co.

**BELLS, CHURCH.**  
Chaplan-Fulton Mfg. Co.  
National Tube Co.

**BELLS, ELECTRIC.**  
Union Electric Co.

**BELLS, FIRE ALARM.**  
Chaplan-Fulton Mfg. Co.  
National Tube Co.

**BELLS, LOCOMOTIVE SEAMLESS.**  
National Tube Co.

**BELLS, MALLEABLE BRONZE.**  
Lawrenceville Bronze Co.

**BELLS, MARINE SERVICE.**  
National Tube Co.

**BELLS, MOTOR BOAT.**  
National Tube Co.

**BELTING, LEATHER.**  
Hartley-Rose Belting Co.  
Pittsburgh Rubber & Leather Co.

**BELTING, MACHINERY.**  
Hartley-Rose Belting Co.

**BELTING, RUBBER.**  
Pittsburgh Rubber & Leather Co.

**BELTS, LEATHER.**  
Caplan, S.  
Kamin, Henry.

**BENCHES, DRAW, FOR TUBE MILLS.**  
Gillespie Mfg. Co.

**BENDERS, COUPLING.**  
United Engineering & Foundry Co.

**BENDERS, EFFICIENCY ROD, FOR CONCRETE WORKERS.**  
Electric Welding Co.

**BENDERS, GLASS.**  
Standard Plate Glass Co.

**BENDERS, PIPE.**  
National Tube Co.  
Pittsburgh Piping & Equipment Co.  
Pittsburgh Valve Foundry & Construction Co.  
Steel City Electric Co.

**BENDERS, RAIL.**  
Garrison, A. Foundry Co.  
Hardsocg Martin Co.  
Turner, C. A., Inc.  
Valley Forging Co.  
Verona Tool Works.  
Western Tool & Forge Co.

**BENDS, BRASS.**  
Best Mfg. Co.

**BENDS, COPPER PIPE.**  
Stender Coppersmith Co., The.  
Best Mfg. Co.

**BENDS, CAST IRON PIPE.**  
Kelly & Jones.  
Pittsburgh Valve Foundry & Construction Co.

**BENDS, FLANGED.**  
Kelly & Jones.

**BENDS, DRAINAGE.**  
Kelly & Jones.

**BENDS, IRON.**  
Best Mfg. Co.  
Kelly & Jones.  
National Tube Co.  
Pittsburgh Gage & Supply Co.  
Pittsburgh Valve Foundry & Construction Co.

**BENDS, PIPE.**  
Kelly & Jones.  
National Tube Co.  
Pittsburgh Gage & Supply Co.  
Pittsburgh Valve Foundry & Construction Co.

**BENDS, PIPE EXPANSION.**  
American Foundry & Construction Co.

**BENDS, LEAD.**  
National Lead & Oil Co.

**BENDS, Y.**  
Kelly & Jones.

**BEVELS, GLASS BEVELERS.**  
Pittsburgh Plate Glass Co.

**BIBBS, BATH.**  
Standard Sanitary Mfg. Co.

**BIBBS, COMPRESSION.**  
Kelly & Jones Co., The.  
Standard Sanitary Mfg. Co.

**BIBBS, GROUND.**  
Kelly & Jones Co., The.

**BIBBS, SELF CLOSING. (Boston, Dougherty and Standard.)**  
Standard Sanitary Mfg. Co.

**BIBBS, WASH TRAY.**  
Standard Sanitary Mfg. Co.

**BILLETS, STEEL.**  
Carnegie Steel Co.  
Clinton Iron & Steel Co.  
Crucible Steel Co. of America.  
National Tube Co.  
Pittsburgh Steel Co.  
Republic Iron & Steel Co.

**BILLETS, ACID STEEL. (For high grade wire rods and cable.)**  
Carbon Steel Co.

**BINDERS, CONCRETE.**  
Consolidated Expanded Metal Co.  
Expanded Metal Fireproofing Co.

**BINS, COAL.**  
Munroe, R. & Son.  
Riter-Conley Mfg. Co.

**BITS, MINING MACHINE.**  
Hardsocg Martin Co.  
Iron City Tool Works.  
Pittsburgh Steel Mfg. Co.  
Pittsburgh Trolley & Forge Co.  
Turner, C. A., Inc.

**BITS, SCREW DRIVER.**  
Jackson Bros.

**BITTERS, HERB.**  
Hollander Bros. Drug Co.

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| <b>BITTERS, STOMACH.</b><br>Hostetter Co., The.  | <b>BLOCKS, PAVING STONE.</b><br>Jones, Evan & Co.  |
| <b>BLACKING, COKE, INGOT &amp; ROLL.</b><br>Obermayer, S. Co., The   | <b>BLOCKS, PAVING.</b><br>Monongahela Clay Mfg. Co.  |
| <b>BLADES, SAW.</b><br>Emerson-Smith Co.   | <b>BLOCKS, PULLEY.</b><br>Pittsburgh Block & Mfg. Co. (Wood<br>or steel.)<br>Patterson, W. W. Co.  |
| <b>BLADES, BAND SAW.</b><br>Emerson-Smith Co.  | <b>BLOCKS, PILLOW.</b><br>Jones & Laughlin Steel Co.   |
| <b>BLADES, SAW, CIRCULAR MILLING.</b><br>Hunter Saw & Machine Co.  | <b>BLOCKS, SNATCH.</b><br>Pittsburgh Block & Mfg. Co.<br>Patterson, W. W. Co.  |
| <b>BLADES, SAW, SCROLL.</b><br>Emerson-Smith Co.   | <b>BLOCKS, SPECIAL.</b><br>Pittsburgh Block & Mfg. Co.   |
| <b>BLADES, STONE SAWING.</b><br>Pittsburgh Steel Co.   | <b>BLOCKS, TACKLE. (For Wire or Manila<br/>Rope.)</b><br>Oil Well Supply Co.<br>Patterson, W. W. Co.<br>Pittsburgh Block & Mfg. Co.              |
| <b>BLANKS, FOR CUT GLASS TABLE WARE.</b><br>Fry, H. C. Glass Co.   | <b>BLOOMS, CHARCOAL IRON.</b><br>Spang, Chalfant Co.<br>Tyler Tube & Pipe Co., The.  |
| <b>BLANKS, HARROW DISC.</b><br>Universal Rolling Mill Co.  | <b>BLOOMS, KNOBBLED.</b><br>Tyler Tube and Pipe Co., The.  |
| <b>BLANKS, SEEDING MACHINERY.</b><br>Universal Rolling Mill Co.  | <b>BLOOMS, STEEL.</b><br>Carnegie Steel Co.<br>Crucible Steel Co.<br>Jones & Laughlin Steel Co.<br>National Tube Co.                             |
| <b>BLANKS, STEEL GEAR.</b><br>Carnegie Steel Co.   | <b>BLOWERS, ELECTRIC.</b><br>Westinghouse Electric & Mfg. Co.  |
| <b>BLANKS, STEEL SAW.</b><br>Universal Rolling Mill Co.  | <b>BLUING, BAG.</b><br>Chamberlain & Johnson.<br>Marine Oil Co.<br>Sanitary Chemical Co.<br>Tweed & Botsford.                                    |
| <b>BLEACH, LAUNDRY.</b><br>Hangsterfer, G. Chemical Co.  | <b>BLUING, BOTTLE.</b><br>Tweed & Botsford.  |
| <b>BLINDS, INSIDE, OUTSIDE &amp; SLIDING.</b><br>Commercial Sash & Door Co.  | <b>BLUING, BOX.</b><br>Sanitary Chemical Co.   |
| <b>BLOCKS, DIE.</b><br>Braeburn Steel Co. (Open hearth and<br>crucible steel.)<br>Colonial Steel Co.<br>Firth-Sterling Steel Co.<br>Heppenstall Forge & Knife Co.<br>Vulcan Crucible Steel Co. | <b>BLUING, LAUNDRY.</b><br>Swearingen, J. C. Ink Co.   |
| <b>BLOCKS, HOLLOW BRICK BUILDING.</b><br>American Sewer Pipe Co.<br>National Fireproofing Co.<br>Pittsburgh-Buffalo Co.  | <b>BLUING, LIQUID.</b><br>Chamberlain & Johnson.<br>Marine Oil Co.   |
| <b>BLOCKS, HOISTING.</b><br>Patterson, W. W. Co.   | <b>BOARDS, CORK.</b><br>Armstrong Cork Co.   |
| <b>BLOCKS, GLASS HOUSE TANK.</b><br>Willetts Co., The.   | <b>BOARDS, DRAIN.</b><br>Standard Sanitary Mfg. Co. (Porce-<br>lain.)<br>United States Sanitary Mfg. Co.<br>(Enameled.)<br>Gloekler, Bernard Co. |
| <b>BLOCKS, GLASS MELTING FURNACE<br/>TANK.</b><br>Pittsburgh Clay Pottery Co.  | <b>BOARDS, IRONING.</b><br>Acme Mfg. Co.   |
| <b>BLOCKS, MOLDED, WOOD CORNER.</b><br>Commercial Sash & Door Co.  | <b>BOARDS, PASTRY.</b><br>Acme Mfg. Co.  |
| <b>BLOCKS, MULTIPLE GEAR CHAIN.</b><br>Tuckey Bros. (For stone, granite and<br>marble works.)  |  |
| <b>BLOCKS, PAVING, GRANITE.</b><br>Booth & Flinn, Ltd.<br>Jones, Evan & Co.  |  |
| <b>BLOCKS, PAVING, REPRESSED.</b><br>Pennsylvania Clay Co.   |  |

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| <b>BOARDS, SKIRT.</b><br>Acme Mfg. Co.   | <b>BOILERS, RANGE.</b><br>Scaife, William B. & Sons.   |
| <b>BOARDS, SLEEVE.</b><br>Acme Mfg. Co.  | <b>BOILERS, RICE.</b><br>Dunlap, John Co.  |
| <b>BOARDS, SWITCH, ELECTRIC PANEL.</b><br>Pittsburgh Electrical & Machine Works.<br>Westinghouse Electric & Mfg. Co.   | <b>BOILERS, SECTIONAL, CAST IRON.</b><br>Winner Natural Gas Burner Co.   |
| <b>BOATS, CLINKER.</b><br>Price, R. C. Co.   | <b>BOILERS, STEAM, TUBULAR.</b><br>Beaver Valley Boiler Works.<br>Carlin's, Thomas Sons.<br>Lappan, James Mfg. Co.<br>Munroe, R. & Sons. (Vertical and horizontal)<br>Parsons Mfg. Co.<br>Reese, James & Son.<br>Riter-Conley Mfg. Co.<br>Scaife, William B. & Sons. |
| <b>BOATS, DERRICK.</b><br>Carlin's, Thomas Sons.   |  |
| <b>BOATS, MOTOR.</b><br>Oakmont Motor Boat Co.<br>Price, R. C. Co.   |  |
| <b>BOATS, PACKET.</b><br>Dravosburg Dock Co.   | <b>BOILERS, STEAM, WATER TUBE.</b><br>Oil Well Supply Co.  |
| <b>BOATS, PLEASURE, ALL KINDS.</b><br>Dravosburg Dock Co.<br>McLellan, Jos. S.<br>Oakmont Motor Boat Co.<br>Price, R. C. Co.   | <b>BOILERS, STEEL.</b><br>Long, Walter Mfg. Co.  |
| <b>BOATS, STEEL.</b><br>Reese, James & Son.  | <b>BOILERS, WASH, COPPER.</b><br>Pgh. Tinware Mfg. Co.<br>Schwartz, H.   |
| <b>BOATS, TOW.</b><br>Dravosburg Dock Co.<br>Reese, James & Son.   | <b>BOILERS, WASH, GALVANIZED.</b><br>Pittsburgh Tinware Mfg. Co.   |
| <b>BOATS, TUG.</b><br>Reese, James & Son.  | <b>BOILERS, WASH, TIN.</b><br>Schwartz, H.   |
| <b>BOATS, WOODEN.</b><br>Reese, James & Son.   | <b>BOILER SETTINGS.</b><br>Naismith, George & Son.   |
| <b>BOBBINS, FISHING LINE.</b><br>Armstrong Cork Co.  | <b>BOLSTERS, FOR BEDS.</b><br>Diamond Mattress Co.   |
| <b>BODIES, AUTOMOBILE.</b><br>Glesenkamp, L. & Sons Co. (Wood.)<br>Schnabel, G. A. & Sons.<br>Thompson, E. J. Co. (Aluminum,<br>wood and sheet steel.)<br>West, C. & Co. (All kinds.)        | <b>BOLSTERS, CAR BODY TRUCK.</b><br>Pittsburgh Steel Foundry.<br>Pressed Steel Car Co.<br>Standard Steel Car Co.   |
| <b>BODIES, BUGGY.</b><br>Keystone Sheet Metal Co. (All steel<br>piano box.)  | <b>BOLTS, ANCHOR.</b><br>Fort Pitt Forge Co.<br>Oliver Iron & Steel Co.<br>Pittsburgh Screw & Bolt Co.<br>Turner, C. A., Inc.  |
| <b>BODIES, CARRIAGE.</b><br>Glesenkamp, L. & Sons Co.<br>West, C. & Co.  | <b>BOLTS, AUTOMOBILE TIRE.</b><br>Western Tool & Forge Co.   |
| <b>BODIES, TRUCK, AUTO.</b><br>Kholos Wagon Co.<br>McClinton & Co.<br>Schnabel, G. A. & Sons.  | <b>BOLTS, AWNING.</b><br>Lanz, M. & Son.   |
| <b>BOILERS, HOUSE HEATING.</b><br>Reese, James & Son.<br>Reliance Heater & Supply Co.<br>Scaife, William B. & Sons.<br>Standard Heating & Radiator Co.<br>Thermo Gas Boiler Co. (Hot water.) | <b>BOLTS, BLANK.</b><br>Garland Nut & Rivet Co.<br>National Bolt & Nut Co.<br>Oliver Iron & Steel Co.<br>Pittsburgh Screw & Bolt Co.<br>Republic Iron & Steel Co.  |
| <b>BOILERS, ENAMELED COFFEE.</b><br>Dunlap, John Co.   | <b>BOLTS, BOILER.</b><br>Lockhart Iron & Steel Co.<br>National Bolt & Nut Co.<br>Oliver Iron & Steel Co.<br>Pittsburgh Screw & Bolt Co.  |
| <b>BOILERS, MILK.</b><br>Dunlap, John Co.  | <b>BOLTS, BRIDGE.</b><br>Graham Nut Co.<br>Lanz, M. & Son.<br>National Bolt & Nut Co.<br>Oliver Iron & Steel Co.<br>Pittsburgh Forge & Iron Co.<br>Pittsburgh Rivet Co.<br>Scaife, William B. & Sons.  |
| <b>BOILERS, MARINE.</b><br>Munroe, R. & Sons.  |  |

**BOLTS, BUTTON HEAD.**  
Oliver Iron & Steel Co.

**BOLTS, CAR.**  
Lanz, M. & Son.  
National Bolt & Nut Co.  
Oliver Iron & Steel Co.  
Pittsburgh Rivet Co.

**BOLTS, CARRIAGE.**  
Fort Pitt Forge Co.  
Garland Nut & Rivet Co.  
Graham Nut Co.  
Lanz, M. & Son.  
Oliver Iron & Steel Co.  
Pittsburgh Screw & Bolt Co.

**BOLTS, COLLAR.**  
Oliver Iron & Steel Co.  
Pittsburgh Rivet Co.

**BOLTS, COUNTERSUNK.**  
Garland Nut & Rivet Co.  
Lanz, M. & Son.  
Oliver Iron & Steel Co.

**BOLTS, COUPLING.**  
Pittsburgh Screw & Bolt Co.

**BOLTS, CROSS ARM.**  
Garland Nut & Rivet Co.  
Lanz, M. & Son.  
National Bolt & Nut Co.

**BOLTS, DOCK.**  
Oliver Iron & Steel Co.

**BOLTS, DOUBLE END.**  
Lanz, M. & Son.

**BOLTS, DRAW AND EYE, DROP FORGED.**  
Diamond Forging & Mfg. Co. (For Wagons.)

**BOLTS, DRIFT.**  
Jones & Laughlin Steel Co.  
Lanz, M. & Son.  
Oliver Iron & Steel Co.  
Pittsburgh Rivet Co.  
Turner, C. A., Inc.

**BOLTS, ELEVATOR.**  
Lockhart Iron & Steel Co.  
Republic Iron & Steel Co.

**BOLTS, EXPANSION.**  
Hubbard & Co.  
Lanz, M. & Son.  
National Bolt & Nut Co.

**BOLTS, FOUNDATION.**  
Fort Pitt Forge Co.  
Graham Nut Co.  
Pittsburgh Forge & Iron Co.  
Pittsburgh Rivet Co.  
Pittsburgh Screw & Bolt Co.  
Republic Iron & Steel Co.  
Turner, C. A., Inc.

**BOLTS, GALVANIZED.**  
National Bolt & Nut Co.  
Republic Iron & Steel Co.

**BOLTS, HANGER.**  
Pittsburgh Screw & Bolt Co.  
Kelly & Jones Co., The.

**BOLTS, HOOK.**  
Oliver Iron & Steel Co.

**BOLTS, KEY.**  
Lanz, M. & Son.  
Pittsburgh Rivet Co.

**BOLTS, KING.**  
Lanz, M. & Son.  
Republic Iron & Steel Co.

**BOLTS, LAG.**  
Oliver Iron & Steel Co.

**BOLTS, MACHINE.**  
Etna Forge & Iron Co.  
Fort Pitt Forge Co.  
Garland Nut & Rivet Co.  
Kelly & Jones Co., The.  
Oliver Iron & Steel Co.  
Pittsburgh Forge & Iron Co.  
Pittsburgh Rivet Co.  
Pittsburgh Screw & Bolt Co.  
National Bolt & Nut Co.

**BOLTS, REACH.**  
Garland Nut & Rivet Co.

**BOLTS, RING.**  
Hubbard & Co. ("Pierce.")

**BOLTS, ROOF.**  
Fort Pitt Forge Co.  
National Bolt & Nut Co.  
Oliver Iron & Steel Co.

**BOLTS, SCREW.**  
Oliver Iron & Steel Co.

**BOLTS, SEAT.**  
Garland Nut & Rivet Co.

**BOLTS, SEMI-FINISHED.**  
Fort Pitt Forge Co.

**BOLTS, SKEIN.**  
Oliver Iron & Steel Co.

**BOLTS, SINK.**  
Republic Iron & Steel Co.  
Standard Sanitary Mfg. Co.

**BOLTS, SPECIAL.**  
Pittsburgh Block & Mfg. Co.  
Turner, C. A., Inc.

**BOLTS, STAY.**  
Flannery Bolt Co.  
National Tube Co. (Hollow.)  
Oliver Iron & Steel Co.  
McKay, James Co.

**BOLTS, STOVE.**  
Republic Iron & Steel Co.

**BOLTS, STRUCTURAL.**  
Lanz, M. & Son.  
Scaife, William B. & Sons.

**BOLTS, STUD.**  
Garland Nut & Rivet Co.  
Graham Nut Co.  
Oliver Iron & Steel Co.  
Scaife, William B. & Sons.

**BOLTS, TAP.**  
Lanz, M. & Son.  
Oliver Iron & Steel Co.

**BOLTS, TRACK.**

Graham Nut Co.  
 Jones & Laughlin Steel Co.  
 Lanz, M. & Son.  
 National Bolt & Nut Co.  
 Oliver Iron & Steel Co.  
 Pittsburgh Forge & Iron Co.  
 Republic Iron & Steel Co.

**BOLTS, TRUNK.**

National Bolt & Nut Co.

**BOLTS, TURNED.**

Fort Pitt Forge Co.

**BOLTS, U.**

Oliver Steel & Iron Co.

**BOLTS, UPSET END.**

Oliver Iron & Steel Co.

**BOLTS, WING.**

Oliver Iron & Steel Co.

**BONDS, BRICK, WIRE.**

Keystone Wire Matting Co.

**BONDS, RAIL.**

Union Electric Co.  
 Westinghouse Electric & Mfg. Co.

**BOOKS, METER READING.**

Pittsburgh Meter Co.

**BOOKS, WEIGHT TICKET.**

Standard Scale & Supply Co.

**BOOSTERS, ELECTRIC.**

Westinghouse Electric & Mfg. Co.

**BOSHES, MECHANICAL.**

Heyl & Patterson.

**BOTTLES, AMBER.**

Cunningham, D. O. Glass Co.  
 Glenshaw Glass Co.  
 Imperial Glass Co.  
 Wormser Glass Co.

**BOTTLES, AMMONIA.**

Glenshaw Glass Co.

**BOTTLES, BAR.**

Cooperative Flint Glass Co.  
 American Glass Specialty Co. (Cut  
 and lettered glass.)  
 United States Glass Co.

**BOTTLES, BEER.**

Cunningham, D. O. Glass Co.  
 Rochester Tumbler Works.  
 Tibby Bros. Glass Co.  
 Hamilton, J. T. & A.

**BOTTLES, BITTERS.**

Cooperative Flint Glass Co.  
 Rochester Tumbler Works.  
 United States Glass Co.

**BOTTLES, BLUE.**

Imperial Glass Co.

**BOTTLES, CATSUP.**

Glenshaw Glass Co.

**BOTTLES, DRUGGISTS'.**

Crescent Bottle Co.  
 Flaccus, C. L. Glass Co.  
 Hamilton, J. T. & A.  
 Jeannette Glass Co.  
 Merriman, J. & Co.  
 Fidelity Glass Co.  
 Hazel Atlas Glass Co.  
 Tibby Bros. Glass Co.  
 Wormser Glass Co.

**BOTTLES, FLINT.**

Flaccus, C. L. Glass Co.  
 Hazel Atlas Glass Co.  
 Glenshaw Glass Co.  
 Imperial Glass Co.  
 Jeannette Glass Co.  
 Wormser Glass Co.

**BOTTLES, GREEN.**

Cunningham, D. O. Glass Co.  
 Glenshaw Glass Co.  
 Imperial Glass Co.  
 Wormser Glass Co.

**BOTTLES, HORSERADISH.**

Glenshaw Glass Co.

**BOTTLES, INK.**

Hazel Atlas Glass Co.

**BOTTLES, LIQUOR.**

Tibby Bros. Glass Co.  
 United States Glass Co.

**BOTTLES, MAGNESIA.**

Crescent Bottle Co.

**BOTTLES, MILK.**

Hamilton, J. T. & A.

**BOTTLES, MUCILAGE.**

Hazel Atlas Glass Co.

**BOTTLES, NURSING.**

Crescent Bottle Co.

**BOTTLES, OLIVE.**

Hazel Atlas Glass Co.

**BOTTLES, PACKERS'.**

Crescent Bottle Co.  
 Fidelity Glass Co.  
 Glenshaw Glass Co.  
 Jeannette Glass Co.  
 Tibby Bros. Glass Co.

**BOTTLES, PERFUME.**

Jeannette Glass Co.

**BOTTLES, PRESCRIPTION.**

Crescent Bottle Co.  
 Flaccus, C. L. Glass Co.  
 Hamilton, J. T. & A.  
 Hazel Atlas Glass Co.  
 Jeannette Glass Co.  
 Merriman, J. & Co.  
 Fidelity Glass Co.  
 Tibby Bros. Glass Co.  
 Wormser Glass Co.

**BOTTLES, PRESERVES.**

Fidelity Glass Co.  
 Glenshaw Glass Co.  
 Tibby Bros. Glass Co.

**BOTTLES, SAMPLE.**

Cooperative Flint Glass Co.

**BOTTLES, SODA.**

Cunningham, D. O. Glass Co.  
Glenshaw Glass Co.

**BOTTLES, STEEL.**

National Tube Co.

**BOTTLES, STERILIZING.**

Crescent Bottle Co.

**BOTTLES, TOILET.**

Jeannette Glass Co.

**BOTTLES, VASELINE.**

Hazel Atlas Glass Co.

**BOTTLES, WATER.**

Hamilton, J. T. & A.  
Rochester Tumbler Works.  
United States Glass Co.

**BOTTLES, WINE.**

Jeannette Glass Co.

**BOTTOMS, COPPER, ALL KINDS.**

Hussey, C. G. & Co.

**BOWLS, CLOSET.**

Standard Sanitary Mfg. Co.

**BOWLS, FINGER.**

United States Glass Co.

**BOWLS, LAVATORY.**

Standard Sanitary Mfg. Co.

**BOWLS, SEPARATOR.**

National Tube Co.

**BOWLS, WASH, ENAMELED SEAMLESS.**

Duulap, John Co.

**BOXES, ANNEALING.**

National Mfg. Co. (For tin plate.)  
Mesta Machine Co.  
McNeil Bros., James.  
Rheam, S. B. (For sheet mills.)  
Riter-Conley Mfg. Co.  
Scaife, William B. & Sons.  
Treadway Construction Co.

**BOXES, AXLE.**

Gillespie Mfg. Co.  
Pittsburgh Iron & Steel Foundries Co.

**BOXES, BALLOT, METAL.**

McCombs, William Co.

**BOXES, BEER, STEEL.**

Standard Steel Box Co. ("Standard  
Steel.")

**BOXES, BEER, WOOD.**

Russell, W. L. Box & Lumber Co.

**BOXES, BREAD, JAPANNED TIN.**

Pittsburgh Tinware Mfg. Co.

**BOXES, BOND.**

Barnes Safe & Lock Co.

**BOXES, CAKE.**

Pittsburgh Paper Box Co.

**BOXES, CASH.**

Barnes Safe & Lock Co.

**BOXES, CHARGING.**

Taylor-Wilson Mfg. Co.  
Treadway Construction Co.

**BOXES, CIGAR, WOOD.**

Keystone Box Co.  
Smith, P. C. & Bro.  
Wasser, Joseph.

**BOXES, CONFECTIONERY, PAPER.**

Pittsburgh Paper Box Co.  
Rex, D. J. Co.  
Woods, H. H. Paper Box Co.

**BOXES, DESK, PIGEONHOLE.**

Rex, D. J. Co.

**BOXES, CORE.**

Scaife, William B. & Sons.

**BOXES, DRIVING, LOCOMOTIVE.**

Keystone Bronze Co.

**BOXES, DRUG, PAPER.**

Pittsburgh Paper Box Co.  
Rex, D. J. Co.

**BOXES, ELECTRIC FUSE.**

Standard Undergrond Cable Co.  
Westinghouse Electric & Mfg. Co.

**BOXES, ELECTRIC JUNCTION.**

Standard Underground Cable Co.  
Westinghouse Electric & Mfg. Co.  
Steel City Electric Co.

**BOXES, ELECTRIC SWITCH.**

Steel City Electric Co.  
Westinghouse Electric & Mfg. Co.

**BOXES, ELECTRIC WALL.**

Frederick Elder Co.  
Lanz, M. & Son.

**BOXES, FILING, PAPER.**

Pittsburgh Paper Box Co.  
Rex, D. J. Co.

**BOXES, FLOUR, JAPANNED TIN.**

Pittsburgh Tinware Mfg. Co.

**BOXES, FOLDING, PAPER.**

Keystone Box Co.  
Penn Paper Box Co.  
Pittsburgh Paper Box Co.  
Rex, D. J. Co.

**BOXES, GALVANIZED.**

Munroe, R. & Son.

**BOXES, HOLIDAY.**

Keystone Box Co.  
Penn Paper Box Co.  
Pittsburgh Paper Box Co.  
Rex, D. J. Co.

**BOXES, ICE CREAM.**

Pittsburgh Paper Box Co.

**BOXES, JOURNAL.**

Union Spring & Mfg. Co.

**BOXES, LAUNDRY, PAPER.**

Pittsburgh Paper Box Co.  
Rex, D. J. Co.

**BOXES, LETTER.**

Beaver Mfg. Co.

**BOXES, LUNCH.**

Woods, H. H. Paper Box Co.

**BOXES, MAIL.**

Beaver Mfg. Co.

**BOXES, MILK, STEEL.**

Standard Steel Box Co.

**BOXES, MILLINERY, PAPER.**

Keystone Paper Box Co.

Penn Paper Box Co.

Pittsburgh Paper Box Co.

Rex, D. J. Co.

Woods, H. H. Paper Box Co.

**BOXES, PACKING, WOOD.**

Anchor Box &amp; Lumber Co. (Wood Packing.)

Eiler Lumber &amp; Mill Co.

Kress, F. J. Box Co. (Lock corner and slide lid.)

Monessen Box Co.

Keystone Box Co.

Russell, W. L. Box &amp; Lumber Co.

Standard Box &amp; Lumber Co.

**BOXES, PAPER.**

Keystone Box Co. (Commercial.)

Penn Paper Box Co.

Pittsburgh Paper Box Co. (Folding and made up.)

Rex, D. J. Co.

Union Paper Box Co. (Made up.)

Walker's A. Son's Co. (Stiff set up.)

Wasser, Joseph. (Cigar.)

Woods, H. H. Paper Box Co. (Plain and fancy.)

**BOXES, ROUGH, STONE.**

Stone Rough Box &amp; Grave Stone Co. (For caskets.)

National Casket Co. (Wood.)

**BOXES, SAFE DEPOSIT.**

Barnes Safe &amp; Lock Co.

United States Safe &amp; Lock Co.

**BOXES, SHELF.**

Pittsburgh Paper Box Co.

Rex, D. J. Co.

**BOXES, STRONG.**

Barnes Safe &amp; Lock Co.

United States Safe Co.

**BOXES, STUFFING, BRASS.**

National Tube Co.

**BOXES, TOOL, STEEL.**

Standard Steel Box Co. (For automobiles.)

**BOXES, TOTE, SHEET STEEL.**

McClintock &amp; Irvine Co.

Scaife, William B. &amp; Sons.

Wall, P. Mfg. &amp; Supply Co.

**BRACES, CROSS ARM.**

Hubbard &amp; Co. ("Pierce.")

Lanz, M. &amp; Son.

Oliver Iron &amp; Steel Co.

Republic Iron &amp; Steel Co.

**BRACES, DROP FORGED BODY, FOR WAGONS.**

Diamond Forging &amp; Mfg. Co.

**BRACES, RAIL, RAILROAD.**

Carnegie Steel Co.

Dilworth Porter Co.

Republic Iron &amp; Steel Co.

Union Switch &amp; Signal Co.

**BRACES, SURGICAL.**

Feick Bros. Co.

National Artificial Limb &amp; Brace Mfg. Co.

Pittsburgh Orthopedic Co.

**BRACES, TRENCH.**

Duff Mfg. Co. (For sewerage.)

**BRACES, WAGON SIDE.**

Oliver Iron &amp; Steel Co.

**BRACKETS, LAMP, NICKEL PLATED.**

Pittsburgh Lamp Brass &amp; Glass Co.

**BRACKETS, LAVATORY.**

Kelly &amp; Jones Mfg. Co., The Standard Sanitary Mfg. Co.

**BRACKETS, POLE, TROLLEY.**

Hubbard &amp; Co.

Lanz, M. &amp; Son.

Oliver Iron &amp; Steel Co.

Union Electric Co.

**BRACKETS, RAIL, BRASS OR BRONZE.**

McKenna Bros. Brass Co.

**BRACKETS, SHELF.**

McKinney Mfg. Co.

**BRACKETS, SINK.**

Kelly &amp; Jones Mfg. Co., The Standard Sanitary Mfg. Co.

**BRACKETS, SPREADER.**

Hubbard &amp; Co.

**BRACKETS, STAIR, WOOD COMPOSITION.**

Commercial Sash &amp; Door Co.

**BRACKETS, TERMINAL.**

Hubbard &amp; Co.

**BRACKETS, WOOD.**

Edgcomb, W. H. &amp; Sons. Commercial Sash &amp; Door Co.

**BRAKES, AIR.**

Westinghouse Air Brake Co.

**BRAKES, AUTOMOBILE.**

Liggett Spring &amp; Axle Co.

**BRAKES, CAR.**

Westinghouse Air Brake Co.

**BRAKES, CORNICE,**

Garrison, A. Foundry Co.

**BRAKES, LOCOMOTIVE.**

Westinghouse Air Brake Co.

**BRAKES, TROLLEY.**

Westinghouse Air Brake Co.

**BRAKES, VACUUM.**

Westinghouse Air Brake Co.

**BRAN.**

Irwin Flour Mills.

**BRANCHES, "Y" AND DOUBLE "Y."**

National Tube Co.

**BRANDS, BURNING.**

Matthews, James H. &amp; Co.

Pannier Bros. Stamp Co.

**BRASS, ALUMINUM.**

Aluminum Co. of America.

**BRASS ARCHITECTURAL WORK.**Artistic Brass Mfg. Co.  
McIlroy, J. D. & Son.**BRASS CASTINGS.**

Bronze Age Metal Co.

**BRASS ELECTRICAL FIXTURES.**

Architectural Bronze Co.

**BRASS FIXTURES.**

McKenna Bros. Brass Co.

**BRASS FITTINGS.**

Acheson Mfg. Co.

**BRASS FOUNDRY.**

Fisher, A. J. Co.

**BRASS NIPPLES.**

Acheson Mfg. Co.

**BRASS ORNAMENTAL WORK.**Cornwall, E. & Co.  
Artistic Brass Mfg. Co.**BRASS RAILINGS & FITTINGS.**

McKenna Bros. Brass Mfg. Co.

**BRASS, SHEET WORK.**Angermyer, W. F. Co.  
East End Brass & Electroplating Co.  
Hammer, C. Otto.  
Marvel Burner & Mfg. Co.  
Nobbs, Grant C. & Co.  
O'Leary, J. B.**BRASS SPECIALTIES.**Acheson Mfg. Co.  
Adams Bros. Mfg. Co.**BRASS, UNIONS.**

Acheson Mfg. Co.

**BRAZIERS.**

Pittsburgh Reinforced Brazing Machine Co.

**BREAKERS, ELECTRIC CIRCUIT.**Pittsburgh Electrical & Machine Works.  
Westinghouse Electric & Mfg. Co.**BREAKERS, SKULL.**

Carlin's, Thomas Sons.

**BRICK, BUFF, SMOOTH AND ROUGH TEXTURE.**

Darlington Brick &amp; Mining Co.

**BRICK, CHROME.**

HARBISON WALKER REFRactories Co.

**BRICK, COMMON, RED.**Blair & Bro.  
Carnegie Brick & Stone Co.  
Central Tube Co.  
Darlington Brick & Mining Co.  
Daugherty Brick Co.  
Entress Brick Co.  
Fort Pitt Stone & Brick Co.  
Francies, W. & J. Co.  
Gloninger Co.  
HARBISON WALKER REFRactories Co.  
Iron City Brick & Stone Co. (Hollow.)  
Jones, Evan & Co.**BRICK, COMMON, RED.**Lanz, M. & Son.  
Monongahela Clay Mfg. Co.  
McKeesport Brick Co.  
Pittsburgh Callery Brick Co.  
Fox, James T.  
Sankey Bros.  
Smith Bros. Brick Co.  
Squirrel Hill Brick Co.  
Tempest Brick Co.  
Ward, John H. & Sons Co.  
Weinman Bros.  
West End Stone & Brick Co.**BRICK, CORK PAVING.**Armstrong Cork Co. (For stables,  
warehouses, platforms, etc.)**BRICK, DEVONSHIRE.**

Fox, James T.

**BRICK, FACE, MOTTLED.**

Keystone Clay Products Co.

**BRICK, FACE, WIRE CUT.**

Sankey Bros.

**BRICK, FACE, MOLDED SAND.**

Francies, W. &amp; J. Co.

**BRICK, FACE, ALL SHADES.**

Monongahela Clay Mfg. Co.

**BRICK, FIRE.**American Sewer Pipe Co.  
Black Fox Brick Co.  
Gloninger Co.  
HARBISON WALKER REFRactories Co.  
Kittanning Brick & Fire Clay Co.  
McLain Fire Brick Co.**BRICK, FOUNDATION.**Lanz, M. & Son.  
Sankey Bros.**BRICK, FRONT.**Francies, W. & Co.  
Gloninger Co.  
Lanz, M. & Son.**BRICK, GRAY.**

Darlington Brick &amp; Mining Co.

**BRICK, HARD BUILDING.**

Sankey Bros.

**BRICK, HOLLOW.**HARBISON WALKER REFRactories Co.  
IRON CITY BRICK & STONE CO.  
Sankey Bros.  
Ward, John H. & Sons Co.**BRICK, IMPERVIOUS HIGH GRADE RED.**

Keystone Clay Products Co.

**BRICK, MAGNESIA.**

HARBISON WALKER REFRactories Co.

**BRICK, MOLDED SAND FACE.**

Francies, W. &amp; J. Co.

**BRICK, PAVING.**Gloninger Co.  
Pennsylvania Clay Co. (Repressed.)  
Union Sewer Pipe Co.**BRICK, PRESSED.**Iron City Brick & Stone Co.  
Sankey Bros.

**BRICK, SELECT.**

Ward, John H. &amp; Sons Co.

**BRICK, SHALE RED.**Fort Pitt Stone & Brick Co.  
Youghiogheny Brick & Supply Co.**BRICK, SILICA.**Black Fox Brick Co.  
Harbison Walker Refractories Co.  
Kittanning Brick & Fire Clay Co.  
White, Scott A.**BRICK, TAPESTRY.**

Sankey Bros.

**BRICK, TERRA COTTA.**Harbison Walker Refractories Co.  
National Fireproofing Co.  
Ward, John H. & Sons Co.**BRICK, VITRIFIED FIRE CLAY, WIRE CUT.**

Pennsylvania Fire Clay Co.

**BRIDGES, BASCULE.**American Bridge Co.  
McClintic-Marshall Construction Co.  
Pennsylvania Bridge Co.**BRIDGES, COAL HANDLING.**

Heyl &amp; Patterson.

**BRIDGES, IRON.**Carroll-Porter Boiler & Tank Co.  
Crucible Steel Co.  
Pennsylvania Bridge Co.  
Pittsburgh Bridge & Iron Works.**BRIDGES, ORE HANDLING.**

Heyl &amp; Patterson.

**BRIDGES, STEEL.**American Bridge Co.  
Carroll-Porter Boiler & Tank Co.  
Crucible Steel Co.  
Eichleay, John Jr., Co.  
Fort Pitt Bridge Works.  
McClintic-Marshall Construction Co.  
Pennsylvania Bridge Co.  
Pittsburgh Bridge & Iron Works.  
Riter-Conley Mfg. Co.  
Scaife, William B. & Sons.**BROILERS.**

Glockler, Bernard Co.

**BROMINE.**

Beck, John A. Salt Co., The.

**BRONZE.**Aluminum Co. of America.  
Roessing Bronze Co.  
Damascus Bronze Co.**BRONZE, ANTI-ACID.**Damascus Bronze Co.  
Fitzpatrick, J. G. Mfg. Co.**BRONZE CASTINGS.**Bronze Age Metal Co.  
James & Edwards.

Lawrenceville Bronze Co.

**BRONZE FIXTURES, ELECTRIC LIGHTING.**

Architectural Bronze Co.

**BRONZE, NICKEL.**

Damascus Bronze Co.

**BRONZE, PHOSPHOR.**

Damascus Bronze Co.

**BROOMS, FLOOR.**Berberich, Chas. & Co.  
Danzinger Broom Mfg. Co.  
Pittsburgh Brush Co.**BROOMS, METAL CASE.**

Lang Broom Co.

**BROOMS, MILL.**

Lang Broom Co.

**BROOMS, HOUSE.**Excelsior Broom Co.  
Gold, Charles & Son.  
Lang Broom Co.**BROOMS, STREET.**

Pittsburgh Brush Co.

**BROOMS, STREET PUSH.**

Lang Broom Co.

**BROOMS, STREET ROLLER.**

Lang Broom Co.

**BROOMS, WIRE.**

Lang Broom Co.

**BROOMS, TOY.**

Lang Broom Co.

**BROOMS, WHISK.**

Lang Broom Co.

**BRUSHES, ARTISTS'.**

Wolfe Brush Co.

**BRUSHES, BADGER.**

Wolfe Brush Co.

**BRUSHES, BAKERS.**

Wolfe Brush Co.

**BRUSHES, CAR.**

Wolfe Brush Co.

**BRUSHES, CARBON FOR DYNAMO.**

Westinghouse Electric &amp; Mfg. Co.

**BRUSHES, COLOR.**

Wolfe Brush Co.

**BRUSHES, DUSTING.**

Wolfe Brush Co.

**BRUSHES, FILLER.**

Wolfe Brush Co.

**BRUSHES, FLOOR.**

Wolfe Brush Co.

**BRUSHES, FLUE, WIRE.**

Gem Mfg. Co.

**BRUSHES, GLUE.**

Wolfe Brush Co.

**BRUSHES, GRAINERS.**

Wolfe Brush Co.

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| <b>BRUSHES, HAND.</b>                   | <b>BUCKETS, CORRUGATED, GALVANIZED.</b>  |
| Wolfe Brush Co.                         | Pittsburgh Cornice & Roofing Co.         |
| <b>BRUSHES, KALSOMINE.</b>              | <b>BUCKETS, DINNER, OBLONG, OVAL AND</b> |
| Wolfe Brush Co.                         | ROUND COVERED.                           |
| Wolfe Brush Co.                         | Dunlap, John Co.                         |
| <b>BRUSHES, MACHINE.</b>                | <b>BUCKETS, DREDGING.</b>                |
| Wolfe Brush Co.                         | Scaife, William B. & Sons Co.            |
| <b>BRUSHES, MOLDERS.</b>                | <b>BUCKETS, EXCAVATING.</b>              |
| Wolfe Brush Co.                         | Scaife, William B. & Sons Co.            |
| <b>BRUSHES, NAIL.</b>                   | <b>BUCKETS, GREASE.</b>                  |
| Wolfe Brush Co.                         | Gem Mfg. Co.                             |
| Wolfe Brush Co.                         | Sands Mfg. Co., The. (Brazed steel.)     |
| <b>BRUSHES, PAINT.</b>                  | <b>BUCKETS, HOISTING.</b>                |
| Condon Bros. Co.                        | Carlin's, Thomas Sons. (Orange peel      |
| Lawrence, W. W. Co.                     | and clam shell.)                         |
| Pittsburgh Brush Co.                    | Scaife, William B. & Son's Co. (Coal     |
| Wolfe Brush Co.                         | and ore.)                                |
| <b>BRUSHES, PAPER HANGERS'.</b>         | <b>BUCKETS, MINERS' TIN DINNER.</b>      |
| Wolfe Brush Co.                         | Grier Bros.                              |
| <b>BRUSHES, PASTE.</b>                  | <b>BUCKETS, STEAM SHOVEL.</b>            |
| Wolfe Brush Co.                         | Scaife, William B. & Sons Co.            |
| <b>BRUSHES, PLASTERERS'.</b>            | <b>BUCKLES, COTTON TIE.</b>              |
| Wolfe Brush Co.                         | Oliver Iron & Steel Co.                  |
| <b>BRUSHES, POTTERY.</b>                | <b>BUCKLES, TURN.</b>                    |
| Wolfe Brush Co.                         | Oliver Iron & Steel Co.                  |
| <b>BRUSHES, RAILROAD.</b>               | <b>BUFFERS, AUTOMOBILE.</b>              |
| Wolfe Brush Co.                         | Pennsylvania Rubber Co.                  |
| <b>BRUSHES, ROOFING.</b>                | <b>BUFFERS, CARRIAGE.</b>                |
| Wolfe Brush Co.                         | Pennsylvania Rubber Co.                  |
| <b>BRUSHES, SCRUB.</b>                  | <b>BUFFERS, ELECTRICALLY OPERATED.</b>   |
| Wolfe Brush Co.                         | Gem Mfg. Co.                             |
| <b>BRUSHES, SPECIAL.</b>                | <b>BUGGIES, CINDER.</b>                  |
| Wolfe Brush Co.                         | Carlin's, Thomas Sons Co.                |
| Wolfe Brush Co.                         | Taylor-Wilson Mfg. Co.                   |
| <b>BRUSHES, STENCIL.</b>                | <b>BUGGIES, PLEASURE.</b>                |
| Wolfe Brush Co.                         | Laderer's, W. C. Carriage Works.         |
| Wolfe Brush Co.                         | West, C. & Co.                           |
| <b>BRUSHES, VACUUM CLEANING.</b>        | <b>BUGGIES, TIMBER.</b>                  |
| Wolfe Brush Co.                         | Pittsburgh Block & Mfg. Co.              |
| <b>BRUSHES, VARNISH.</b>                | <b>BUILDINGS, STEEL.</b>                 |
| Pittsburgh Brush Co.                    | Eichleay, John Jr., Co.                  |
| Wolfe Brush Co.                         | McClinic-Marshall Construction Co.       |
| Wolfe Brush Co.                         | (Factory, mill, office, producer.)       |
| <b>BRUSHES, WALL.</b>                   | <b>BULBS, AUTOMOBILE HORN.</b>           |
| Pittsburgh Brush Co.                    | Pennsylvania Rubber Co.                  |
| Wolfe Brush Co.                         |  |
| <b>BRUSHES, WHITEWASH.</b>              | <b>BULBS, INCANDESCENT LIGHT.</b>        |
| Wolfe Brush Co.                         | Phoenix Glass Co.                        |
| <b>BRUSHES, WINDOW WASH.</b>            | <b>BULLDOZERS.</b>                       |
| Wolfe Brush Co.                         | Garrison, A. Foundry Co.                 |
| <b>BRUSHES, WIRE.</b>                   | <b>BUNGS, CORK, BARREL AND KEG.</b>      |
| Gem Mfg. Co. (Flue.)                    | Armstrong Cork Co.                       |
| Lang Broom Co.                          |  |
| Wolfe Brush Co.                         |  |
| <b>BRUSHES, WOVEN WIRE, FOR DYNAMO.</b> | <b>BUOYS.</b>                            |
| Westinghouse Electric & Mfg. Co.        | Riter-Conley Mfg. Co.                    |
| <b>BUCKETS, BUTTER, ENAMELED OVAL.</b>  |  |
| Dunlap, John Co.                        |  |

**BUOYS, CORK, LIFE AND MARINE.**  
Armstrong Cork Co.

**BURNERS, ASBESTOS.**  
Law Burner Co.

**BURNERS, CROWN BRICK.**  
Merrill, E. C. (For low pressure steam and hot water heating boilers.)

**BURNERS, FIREPLACE.**  
Penn Burner Co. (Sectional, portable and base.)  
Superior Mfg. Co. ("Superior" steel.)

**BURNERS, BASE.**  
Superior Mfg. Co.

**BURNERS, PORTABLE.**  
Superior Mfg. Co.

**BURNERS, SECTIONAL.**  
Superior Mfg. Co.

**BURNERS, STEEL.**  
Superior Mfg. Co. (Fireplace and grate.)

**BURNERS, GAS.**  
Oil Well Supply Co.

**BURNERS, GAS, FOR LIGHTING PURPOSES.**  
Beacon Lighting Co., The.  
Loyal Burner Mfg. Co.  
Wilcox Lighting Co.

**BURNERS, GAS FURNACE.**  
Gwynn Gas Burner & Engineering Co.  
Standard Heating & Radiator Co.  
Taylor Burner & Electroplating Co.

**BURNERS, GAS, CEMENT KILNS.**  
Tate, Jones & Co.

**BURNERS, GAS, INDUSTRIAL FURNACES.**  
Tate, Jones & Co.

**BURNERS, GAS, INVERTED AND UPRIGHT.**  
Frederick Elder Co.  
Hipwell Mfg. Co. (Upright.)  
McDowell Mfg. Co. (Inverted.)  
Pittsburgh Lamp, Brass & Glass Co. (Upright.)

**BURNERS, GAS, NATURAL.**  
Penn Bridge Co.  
Harkahn Burner Co., The.

**BURNERS, GAS, NATURAL, FOR BOILERS.**  
Winner Natural Gas Burner Co.  
Standard Heating & Radiator Co.

**BURNERS, GAS, SECTIONAL.**  
Adler, H. Co.  
Enterprise Foundry Co.  
Lawson Mfg. Co. (For coal stoves.)  
Penn Burner & Plating Co. (Fireplace.)

**BURNERS, GAS, STRAIGHT LINE.**  
Merrill, E. C. (For power boilers, bake ovens, rivet heaters, etc.)

**BURNERS, GAS, FOR POWER PURPOSES.**  
Tate, Jones & Co.

**BURNERS, GLASS BLOWERS.**  
Frederick-Elder Co.

**BURNERS, GRATE, ASBESTOS.**  
Law Burner Co.

**BURNERS, GRATE, STEEL.**  
Superior Mfg. Co.

**BURNERS, INCANDESCENT.**  
Frederick-Elder Co.  
Hipwell Mfg. Co.  
McDowell Mfg. Co.  
Pittsburgh Lamp, Brass & Glass Co.

**BURNERS, ORDINARY GAS.**  
Adams Bros. Mfg. Co.  
Equitable Meter Co.  
Gwynn Gas Burner & Engineering Co.

**BURNERS, LAMP, ARGAND.**  
Pittsburgh Lamp, Brass & Glass Co.

**BURNERS, LAMP, KEROSENE.**  
Pittsburgh Lamp, Brass & Glass Co.

**BURNERS, OIL.**  
Liquifuel Engineering & Const. Co.  
Oil Well Supply Co.

**BURNERS, OIL, FOR BURNING OF CLAY PRODUCTS.**  
Tate, Jones & Co.

**BURNERS, OIL, FOR INDUSTRIAL FURNACES.**  
Tate, Jones & Co.

**BURNERS, OIL, FOR OPEN HEARTH FURNACES.**  
Tate, Jones & Co.

**BURNERS, OIL, FOR POWER PURPOSES.**  
Tate, Jones & Co.

**BURNERS, RING, DUPLEX.**  
Merrill, E. C. (For small furnaces.)

**BURNERS, SECTIONAL.**  
Adler, H. Co.  
Enterprise Foundry Co.  
Lawson Mfg. Co. (Gas for coal stoves.)  
Penn Burner & Plating Co.

**BURRS, IRON AND STEEL.**  
McKinney Mfg. Co.

**BUSHINGS, BRASS.**  
Kelly & Jones Co., The.

**BUSHINGS, CAST IRON.**  
Kelly & Jones Co., The.  
National Tube Co.

**BUSHINGS, ELECTRIC.**  
Steel City Electric Co.  
Westinghouse Electric & Mfg. Co.

**BUSHINGS, MALLEABLE IRON.**  
Kelly & Jones Co., The.  
National Tube Co.

**BUSHINGS, OIL WELL CASING.**  
Kelly & Jones Co., The.

**BUSHINGS, PIPE.**  
Kelly & Jones Co., The.  
Oil Well Supply Co.  
National Tube Co.

**BUSHINGS, TROLLEY WHEEL.**  
Nuttal, R. D. & Co.

**BUTTER, PEANUT.** Duff, P. & Sons.

**BUTTERINE.** Holland Creamery Co.

**BUTTS, STEEL DOOR.** McKinney Mfg. Co.

**CABINETS, BATH ROOM.** Standard Sanitary Mfg. Co.

**CABINETS, CAPSULE, FOR STORES.** McLean, W. B. Mfg. Co.

**CABINETS, GLASS, OPALITE.** Opalite Tile Co., The.

**CABLES, ALUMINUM ELECTRIC.** Aluminum Co. of America.

**CABLES, BARE.** Standard Underground Cable Co.

**CABLES, CAR.** Standard Underground Cable Co.

**CABLES, CANVASITE.** Standard Underground Cable Co.

**CABLES, CHAIN.** Monongahela Iron & Steel Co.

**CABLES, COVERED, RUBBER OR LEAD.** Standard Underground Cable Co.

**CABLES, DECK.** Standard Underground Cable Co.

**CABLES, DREDGER.** Standard Underground Cable Co.

**CABLES, ELECTRIC.** Aluminum Co. of America. (Alum.-num.) Standard Underground Cable Co.

**CABLES, ELEVATOR.** Standard Underground Cable Co.

**CABLES, ENCASED.** Standard Underground Cable Co.

**CABLES, INSULATED, FIBRE OR PAPER** Standard Underground Cable Co.

**CABLES, IGNITION.** Standard Underground Cable Co.

**CABLES, LAMP.** Standard Underground Cable Co.

**CABLES, LEADED.** Standard Underground Cable Co.

**CABLES, LIGHT.** Standard Underground Cable Co.

**CABLES, MACHINE.** Standard Underground Cable Co.

**CABLES, POWER.** Standard Underground Cable Co.

**CABLES, SUBMARINE.** Standard Underground Cable Co.

**CABLES, TELEPHONE.** Standard Underground Cable Co.

**CABLES, TROLLEY.** Standard Underground Cable Co.

**CABLES, VARNISHED CLOTH.** Standard Underground Cable Co.

**CABLES, WATERPROOF.** Standard Underground Cable Co.

**CABS, ELEVATOR.** Rieger Iron & Wire Works. Somerville Iron & Bronze Co. Taylor & Dean.

**CAGES, MINE.** Mulholland, J. & J. B.

**CAISSENS, BRIDGE.** Carroll-Porter Boiler & Tank Co. McClintic-Marshall Construction Co. Riter-Conley Mfg. Co. Scaife, William B. & Sons.

**CAISSENS, IRON, SHEET.** Carroll-Porter Boiler & Tank Co.

**CAISSENS, STEEL.** McClintic-Marshall Construction Co. Riter-Conley Mfg. Co.

**CALCIUM CHLORIDE.** Beck, John A. Salt Co., The. Pennsylvania Salt Mfg. Co. Pittsburgh Calcium Co.

**CALENDARS.** Baumgarten Printing Co.

**CAMERAS FOR ASTRONOMICAL PURPOSES.** Brashear, John A. Co.

**CANDLES.** Walker, W. & H. Co.

**CANDLESTICKS.** Cooperative Flint Glass Co. (Glass.) United States Glass Co. (Glass.) McKenna Bros. Brass Co. (Brass.)

**CANOPIES, WEDDING.** Pittsburgh Awning Co.

**CANS, ASH.** Scaife, William B. & Sons.

**CANS, GARBAGE.** Dunlap, John Co. Pittsburgh Tinware Mfg. Co. Scaife, William B. & Sons.

**CANS, GASOLINE.** Dunlap, John Co.

**CANS, FACTORY, ICE.** Scaife, William B. & Sons. Wall, P. Mfg. Co.

**CANS, FLOUR.** Pittsburgh Tinware Mfg. Co. (Jappanned.)

**CANS, ICE CREAM MANUFACTURERS'.** Knorr, W. L.

**CANS, IRON, OIL.** Pittsburgh Tinware Mfg. Co. (Gal.)

**CANS, MILK.** King, I. J.

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| <b>CANS, OIL.</b>   | <b>CARRIERS, OIL, HEAVY BRAZED STEEL.</b>  |
| Dunlap, John Co.<br>Gem Mfg. Co. (Heavy brazed steel.)<br>Hardsocg-Martin Co. (Miners'.)<br>Pittsburgh Tinware Mfg. Co. (Gal.<br>iron.)<br>Sands Mfg. Co. (Any capacity.) | Gem Mfg. Co.<br>Sands Mfg. Co.   |
| <b>CANS, OILING.</b>  | <b>CARRIERS, TROLLEY.</b>  |
| McClintock & Irvine.<br>Wall, P. Mfg. Co.   | Pittsburgh Block & Mfg. Co.  |
| <b>CANS, PAINT.</b>   | <b>CARS, ASH.</b>  |
| Enterprise Stamping Co. (Wood<br>jacket.)   | Orenstein, Arthur Koppel Co.<br>United Engineering & Foundry Co.   |
| <b>CANS, POWDER.</b>  | <b>CARS, BAGGAGE, STEEL.</b>   |
| Grier Bros., Ltd. (Tin, for miners.)<br>Pittsburgh Tinware Mfg. Co.   | Pressed Steel Car Co. (All styles and<br>kinds.)   |
| <b>CANS, SHIPPING, WOOD JACKET.</b>   | <b>CARS, BALLAST.</b>  |
| Enterprise Stamping Co. (For paints,<br>oils, varnishes.)   | Pressed Steel Car Co. (All kinds.)   |
| <b>CANS, SUGAR.</b>   | <b>CARS, BILLET.</b>   |
| Pittsburgh Tinware Mfg. Co.<br>(Jappanned.)   | Taylor-Wilson Mfg. Co.<br>United Engineering & Foundry Co.   |
| <b>CANS, WASTE.</b>   | <b>CARS, BOX.</b>  |
| McClintock & Irvine.<br>Sands Mfg. Co.<br>Wall, P. Mfg. Co.   | Pressed Steel Car Co. (All kinds.)   |
| <b>CAPS, CAST IRON.</b>   | <b>CARS, BRICK.</b>  |
| Kelly & Jones Co., The.   | Orenstein, Arthur Kopple Co.   |
| <b>CAPS, BRASS.</b>   | <b>CARS, CHARGING.</b>   |
| Kelly & Jones Co., The.   | Braddock Machine & Mfg. Co. (Box.)<br>Taylor-Wilson Mfg. Co. (Open hearth.)  |
| <b>CAPS, CASING.</b>  | <b>CARS, COAL.</b>   |
| Kelly & Jones Co., The.   | Pressed Steel Car Co. (All kinds.)<br>Orenstein, Arthur Koppel Co.<br>Standard Steel Car Co.   |
| <b>CAPS, CRUCIBLE.</b>  | <b>CARS, COKE.</b>   |
| McCullough-Dalzell Crucible Co.   | Pressed Steel Car Co. (All kinds.)   |
| <b>CAPS, DOOR.</b>  | <b>CARS, COMBINATION MAIL AND BAG-<br/>GAGE, PASSENGER AND BAGGAGE.</b>  |
| Standard Sheet Metal Mfg. Co.   | Pressed Steel Car Co. (All kinds steel.)   |
| <b>CAPS, DRIVE PIPE.</b>  | <b>CARS, COMPOSITE.</b>  |
| National Tube Co.   | Standard Steel Car Co.   |
| <b>CAPS, FENCE POST.</b>  | <b>CARS, CONCRETE.</b>   |
| Lanz, M. & Son Co.  | Pressed Steel Car Co. (All kinds.)   |
| <b>CAPS, HEAD, MINERS'.</b>   | <b>CARS, CONVEYING ELECTRIC.</b>   |
| Hardsocg-Martin Co.   | Heyl & Patterson.  |
| <b>CAPS, MALLEABLE IRON.</b>  | <b>CARS, CREOSOTING.</b>   |
| Kelly & Jones Co., The.   | Orenstein, Arthur Koppel Co.   |
| <b>CAPS, WAGON POLE.</b>  | <b>CARS, DUMP.</b>   |
| Oliver Iron & Steel Co.   | Carlins', Thomas Sons. (Contractors.)<br>Orenstein, Arthur Koppel Co. (Bottom.)<br>Pressed Steel Car Co. (Hopper.)<br>Standard Steel Car Co. |
| <b>CAPS, WINDOW.</b>  | <b>CARS, ELECTRIC.</b>   |
| Standard Sheet Metal Mfg. Co.   | Heyl & Patterson. (Conveying.)<br>Pressed Steel Car Co. (Steel railway<br>underground.)<br>Westinghouse Electric & Mfg. Co.                  |
| <b>CAPSTANS, MARINE STEAM.</b>  | <b>CARS, ELEVATOR.</b>   |
| Reese, James & Son.   | Taylor & Dean.<br>Tyler, W. S. Co., The.<br>Vilsack, Martin Co.  |
| <b>CARRIAGES.</b>   | <b>CARS, EXPRESS.</b>  |
| Glesenkamp, L. & Son Co.<br>Laderer, W. C. Carriage Works.<br>Lenschner, Herman E.<br>McLean & McGinness.<br>Parr Wagon Co.<br>West, C. & Co.                             | Pressed Steel Car Co. (All kinds.)   |
| <b>CARRIERS, BRICK.</b>   | <b>CARS, FLAT.</b>   |
| Turner, C. A., Inc.   | Pressed Steel Car Co. (All kinds.)   |

**CARS, FREIGHT.** Pressed Steel Car Co. (All kinds.)

**CARS, GONDOLA.** Pressed Steel Car Co. (All kinds.)

**CARS, HAND.** Standard Scale & Supply Co.

**CARS, HOT METAL.** Union Foundry & Machine Co.

**CARS, INGOT.** Braddock Mfg. & Machine Co.  
Mesta Machine Co.  
Taylor-Wilson Mfg. Co.  
United Engineering & Foundry Co.

**CARS, LADLE.** Braddock Machine & Mfg. Co.

**CARS, MAIL.** Pressed Steel Car Co. (All kinds steel.)

**CARS, MINE.** Hempfield Foundry Co.  
Hockensmith Wheel & Mine Car Co.  
Irwin Foundry & Mine Car Co.  
Phillips Mine & Mill Supply Co.

**CARS, OIL.** Carroll-Porter Boiler & Tank Co.

**CARS, ORE.** Heyl & Patterson. (Handling.)  
Pressed Steel Car Co. (All kinds.)

**CARS, PASSENGER, STEEL.** Pressed Steel Car Co.  
Standard Steel Car Co.

**CARS, PLATFORM.** Orenstein, Arthur Koppel Co.

**CARS, PUSH.** Standard Scale & Supply Co.

**CARS, RAILROAD.** Pressed Steel Car Co. (All kinds steel.)

**CARS, SLAG.** Union Foundry & Machine Co.  
United Engineering & Foundry Co.

**CARS, STOCK, RAILROAD.** Pressed Steel Car Co. (All kinds.)

**CARS, STREET RAILWAY.** Pressed Steel Car Co. (All kinds steel.)

**CARS, SUBWAY MOTOR.** Pressed Steel Car Co.

**CARS, TANK.** Carroll-Porter Boiler & Tank Co.  
Pressed Steel Car Co. (All kinds steel.)  
Riter-Conley Mfg. Co.  
Scaife, William B. & Sons.

**CARS, TRANSFER.** Orenstein, Arthur Koppel Co.

**CARVINGS, WOOD.** Commercial Sash & Door Co.

**CASES, BURIAL.** Loresch Bros. (Artificial stone.)  
National Casket Co.

**CASES, DISPLAY, HARD WOOD.** McLean, William B. Mfg. Co.

**CASES, FLUID EXTRACT.** McLean, William B. Mfg. Co.

**CASES, MISSION AND HARD WOOD, DISPLAY.** McLean, William B. Mfg. Co.

**CASES, PRESCRIPTION.** McLean, William B. Mfg. Co.

**CASES, SAMPLE, TRAVELERS'.** Boyd, Boyd & Boyd Trunk Co.

**CASES, SHOW.** Kates & Co. (Wood frame and all glass.)  
McLean, W. B. Mfg. Co. (Mission and hard wood.)  
Pittsburgh Hard Wood Working Co.  
Pollard, F.

**CASES, SUIT.** Boyd, Boyd & Boyd Trunk Co. (All kinds.)  
Capitol Trunk & Bag Co.  
Grossman, Simon & Co.  
United Suit Case Co. (Leather.)

**CASING, IRON, WROUGHT.** Byers, A. M. Co. (Standard weight for oil wells.)  
Monongahela Tube Co. (For oil wells.)  
Spang, Chalfant & Co.

**CASING, METAL.** National Tube Co.  
Standard Sheet Metal Mfg. Co.

**CASING, WELL.** Oil Well Supply Co.

**CASKS, FOR GLASSWARE AND CROCKERY.** Walsh, Morris Co.

**CASKETS.** National Casket Co.

**CASTINGS, ALUMINUM.** Cadman, A. W. Mfg. Co.  
Keystone Bronze Co.  
Fitzpatrick J. G. Mfg. Co. (To 300 lbs.)  
Newland Bros.  
Pittsburgh Brass Mfg. Co.  
United States Aluminum Co.  
Vanadium Metals Co.  
Wayne Brass Foundry Co., The.  
(For rolling mills and machinery.)

**CASTINGS, AUTOMOBILE.** United States Aluminum Co.  
Vanadium Metals Co.

**CASTINGS, BRASS.** American Foundry & Const. Co.  
Best Mfg. Co.  
Bronze Age Metal Co.  
Chapman-Fulton Mfg. Co.  
Fisher, A. J. Co.  
Fitzpatrick, J. G. Mfg. Co.  
Kelly & Jones Co., The.  
Mackintosh-Hemphill Co.  
Newlands Bros.  
Pittsburgh Brass Mfg. Co.  
Vanadium Metals Co.  
Wayne Brass Foundry Co.

**CASTINGS, BOILER.**  
Munroe, R. & Sons.

**CASTINGS, BRONZE.**

Best Mfg. Co.  
Bronze Age Metal Co.  
Cadman, A. W. Mfg. Co.  
Damascus Bronze Co.  
Fitzpatrick, J. G. Mfg. Co.,  
Lawrenceville Bronze Co.  
Mackintosh-Hemphill Co.  
Mesta Machine Co.  
Newlands Bros.  
Pittsburgh Brass Mfg. Co.  
Vanadium Metals Co.  
Wayne Brass Foundry Co.

**CASTINGS, BRONZE, ANTI-ACID.**  
Damascus Bronze Co.

**CASTINGS, BRONZE, HYDRAULIC.**  
Damascus Bronze Co.

**CASTINGS, BRONZE, NICKEL.**  
Damascus Bronze Co.

**CASTINGS, BRONZE, PHOSPHOR.**  
Damascus Bronze Co.

**CASTINGS, CAR.**

Duquesne Steel Foundry Co.  
Pennsylvania Malleable Co.

**CASTINGS, COACH.**

Duquesne Steel Foundry Co.  
Pennsylvania Malleable Co.

**CASTINGS, COKE OVEN.**

Charleroi Foundry & Machine Co.

**CASTINGS, COPPER.**

Best Mfg. Co.  
Bronze Age Metal Co.  
Fitzpatrick, J. G. Mfg. Co.  
Lawrenceville Bronze Co.

**CASTINGS, DIE.**

Garrison, A. Foundry Co.

**CASTINGS, DYNAMO.**

Westinghouse Electric & Mfg. Co.

**CASTINGS, ENGINE.**

Mackintosh-Hemphill Co.  
McClintic-Marshall Construction Co.  
Taylor-Wilson Mfg. Co.

**CASTINGS, FURNACE.**

Carnegie Steel Co.  
Dixon, H. L. (Glass.)  
Garrison, A. Foundry Co.  
Kelly, Nicholas & Co. (Glass.)  
Mesta Machine Co.  
Pittsburgh Valve Foundry & Construction Co.  
Rosedale Foundry & Machine Co.  
(Blast.)  
Taylor-Wilson Mfg. Co.  
Union Foundry & Machine Co.

**CASTINGS, GUN METAL.**

Best Mfg. Co.  
Taylor-Wilson Mfg. Co. (Charcoal.)

**CASTINGS, IRON, AIR FURNACE.**

Mesta Machine Co.

**CASTINGS, IRON, CHARCOAL.**

Garrison A. Foundry Co.  
Taylor-Wilson Mfg. Co.

**CASTINGS, IRON, CHILLED.**

Garrison, A. Foundry Co.

**CASTINGS, IRON, GRAY.**

American Bridge Co.  
Best Mfg. Co.  
Bollinger-Andrews Const. Co. (Mill.)  
Carlin's, Thomas Sons.  
Coshocton Iron Co.  
Dixon, H. L. Co.  
Early, W. J. & Sons, Ltd.  
Enterprise Foundry Co.  
Evans Mfg. Co., The.  
Fawcett Machine Co.  
Fisher Foundry Co.  
Fort Pitt Bridge Works.  
Franklin Park Foundry Co. (To 7 tons)  
Gardner Gas Engine Co., The.  
Garrison, A. Foundry Co.  
Jelley, George A. Foundry Co.  
Lathwood, James.  
Mackintosh-Hemphill Co.  
Marshall Foundry Co. (Heavy.)  
Mesta Machine Co. (Heavy.)  
Monessen Foundry & Machine Co.  
Monongahela Foundry & Machine Co.  
McClintic-Marshall Const. Co.  
(Heavy.)

McCullough, James J.  
Pennsylvania Casting & Machine Co.

Phillips & McLaren Co.  
Pittsburgh Foundry & Machine Co.  
Pittsburgh Iron and Steel Foundries Co.  
(All sizes.)

Rosedale Foundry & Machine Co.  
Sharpsburg Foundry Co. (1 lb. to 6 tons.)  
Springfield Foundry Co. (10 lbs. to 14 tons.)

Standard Engineering Co.  
Sterrett, Thomas Foundry Co.  
Taylor-Wilson Mfg. Co.  
Union Foundry & Machine Co.  
Yost Bros.

**CASTINGS, IRON, MALLEABLE.**

Allegheny Valley Malleable Iron Co.  
Fort Pitt Malleable Iron Co.  
McConway & Torley Co.  
Oil Well Supply Co.

**CASTINGS, IRON, MISCELLANEOUS.**  
United Engineering & Foundry Co.

**CASTINGS, LOAM.**

Marshall Foundry Co. (For chemical  
and soap works.)

**CASTINGS, MACHINERY.**

Keystone Bronze Co.  
Knott, Harker & Co.  
Kelly, Nicholas & Son.  
Rosedale Foundry & Machine Co.  
(Blast furnace and rolling mill.)  
Taylor-Wilson Mfg. Co.

**CASTINGS, MARINE.**

Vanaduim Metals Co.

**CASTINGS, MILL.**

Charleroi Foundry & Machine Co.  
Garrison, A. Foundry Co.  
American Steel Foundry Co.  
Taylor-Wilson Mfg. Co. (Rolling.)

**CASTINGS, MINE.**

Charleroi Foundry & Machine Co.  
Irwin Foundry & Mine Car Co.

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| <b>CASTINGS, MODEL.</b><br>Best Mfg. Co.   | <b>CATSUP.</b><br>Heinz, H. J. Co.<br>Lutz & Schramm.   |
| <b>CASTINGS, PIPE MILL.</b><br>Cyclops Foundry Co.   | <b>CEILINGS, METAL, ENAMELED.</b><br>Enamelled Metals Co. (Encaustic.)<br>Pittsburgh Metal Ceiling Co.<br>Scaife, William B. & Sons Co.                 |
| <b>CASTINGS, RAILROAD.</b><br>Pennsylvania Malleable Co.<br>Pittsburgh Malleable Iron Co.<br>Union Foundry & Machine Co.   | <b>CEILINGS, IRON.</b><br>Scaife, William B. & Sons Co.   |
| <b>CASTINGS, ROUGH.</b><br>Braddock Machine & Mfg. Co. (Steel.)<br>Etna Foundry Co.  | <b>CEILINGS, STEEL, SHEET.</b><br>Keighley Metal Ceiling & Mfg. Co.<br>Pittsburgh Cornice & Roofing Co.<br>Reich, W. E.<br>Scaife, William B. & Son Co. |
| <b>CASTINGS, SEMI-STEEL.</b><br>American Foundry & Construction Co.<br>Best Mfg. Co.<br>Coshocton Iron Co.<br>Rosedale Foundry & Machine Co.<br>Taylor-Wilson Mfg. Co.   | <b>CEILINGS, WOOD.</b><br>Edgcomb, W. H. & Sons.<br>Miller, William & Sons Co.  |
| <b>CASTINGS, SEWER.</b><br>Carlin's, Thomas Sons.<br>Charleroi Foundry & Machine Co.   | <b>CEMENTS, BUILDING.</b><br>Jones, Evan & Co.<br>Universal Portland Cement Co.   |
| <b>CASTINGS, STEAM AND HYDRAULIC PIPING.</b><br>Taylor-Wilson Mfg. Co.   | <b>CEMENTS, FURNACE.</b><br>Atlas Paint Co.   |
| <b>CASTINGS, STEEL, ACID.</b><br>Sterling Steel Foundry Co. (O. H.)  | <b>CEMENTS, GAS FITTERS'.</b><br>Chamberlain & Johnson.   |
| <b>CASTINGS, STEEL ALLOYED.</b><br>Mesta Machine Co.   | <b>CEMENTS, GROUND.</b><br>Crescent Portland Cement Co.   |
| <b>CASTINGS, STEEL, CRUCIBLE.</b><br>Fort Pitt Steel Casting Co.   | <b>CEMENTS, IRON.</b><br>Pittsburgh Crushed Steel Co.   |
| <b>CASTINGS, STEEL, LOCOMOTIVE.</b><br>Union Steel Casting Co.   | <b>CEMENTS, LUMP.</b><br>Crescent Portland Cement Co.   |
| <b>CASTINGS, MISCELLANEOUS STEEL.</b><br>Union Steel Casting Co.<br>Velte Foundry & Machine Co.  | <b>CEMENTS, METAL.</b><br>Pittsburgh Crushed Steel Co.  |
| <b>CASTINGS, STEEL, OPEN HEARTH.</b><br>Allegheny Steel Co.<br>Lawrence Steel Casting Co.  | <b>CEMENTS, PAVING, ASPHALTIC.</b><br>Booth & Flinn Co., Ltd.   |
| <b>CASTINGS, STEEL, ROUGH.</b><br>Braddock, Machine & Mfg. Co.<br>Eureka Steel Co.   | <b>CEMENTS, PIPE JOINT.</b><br>Atlas Paint Co.  |
| <b>CASTINGS, STEEL, STRUCTURAL.</b><br>American Bridge Co.<br>Marshall Foundry Co.<br>McClintic-Marshall Construction Co.  | <b>CEMENTS, PLUMBERS'.</b><br>Eagle Paint & Varnish Co.   |
| <b>CASTINGS, STEEL, VANADIUM.</b><br>Union Steel Casting Co.   | <b>CEMENTS, PORTLAND.</b><br>Universal Portland Cement Co.<br>(Universal.)  |
| <b>CASTINGS, STEEL.</b><br>American Foundry & Construction Co.<br>American Steel Foundry.<br>Bollinger-Andrews Construction Co.<br>Duquesne Steel Foundry. (All kinds.)<br>Mackintosh-Hemphill Co.<br>Mesta Machine Co.<br>McClintic-Marshall Construction Co.<br>McConway-Torley Co.<br>Pittsburgh Steel Foundry Co.<br>Reliance Tube Co.<br>United Engineering & Foundry Co. | <b>CEMENT, ROOFERS.</b><br>Atlas Paint Co.  |
| <b>CASTINGS, STREET.</b><br>Charleroi Foundry & Machine Co.<br>Velte Foundry & Machine Co.   | <b>CEMENTS, RUBBER.</b><br>Pennsylvania Rubber Co.  |
|  | <b>CEMENTS, SILICA.</b><br>Black Fox Brick Co.<br>Harbison Walker Refractories Co.  |
|  | <b>CEMENTS, STEAM FITTERS'.</b><br>Eagle Paint & Varnish Co.  |
|  | <b>CEMENTS, STEEL.</b><br>Pittsburgh Crushed Steel Co.  |
|  | <b>CENTERS, CAR WHEEL.</b><br>Pittsburgh Steel Foundry Co.  |
|  | <b>CESSPOOLS, HYDRANT.</b><br>Standard Sanitary Mfg. Co.  |

**CESSPOOLS, CAST IRON.**  
McVay & Walker.

**CHAINS, AGRICULTURAL.**  
McKay, James & Co.  
Standard Chain Co.

**CHAINS, B. B.—B. B.**  
Jones & Laughlin Steel Co.

**CHAINS, BELT, LINK.**  
Franklin Park Foundry (Malleable.).  
Lanz, M. & Son.  
Standard Chain Co.

**CHAINS, BINDING.**  
Standard Chain Co.

**CHAINS, BLOCK.**  
McKay, James & Co.  
Pittsburgh Block & Mfg. Co. (Tackle.)  
Standard Chain Co.

**CHAINS, BOOM.**  
Standard Chain Co.

**CHAINS, BRAKE.**  
Jones & Laughlin Steel Co. (Safety.)  
McKay, James & Co.  
Standard Chain Co.

**CHAINS, CABLE.**  
American Bridge Co.  
Standard Chain Co.

**CHAINS, CART.**  
Standard Chain Co.

**CHAINS, COIL.**  
Jones & Laughlin Steel Co.  
McKay, James & Co.  
Standard Chain Co.

**CHAINS, COIL PROOF.**  
Jones & Laughlin Steel Co.

**CHAINS, CONVEYOR.**  
Jones & Laughlin Steel Co.  
McKay, James & Co.  
Standard Chain Co.  
Turner, C. A., Inc.

**CHAINS, COW TIE.**  
Standard Chain Co.

**CHAINS, CRANE.**  
American Bridge Co.  
Carter Iron Co.  
Jones & Laughlin Steel Co.  
Monongahela Iron & Steel Co.  
McKay, James & Co.  
Nicholson & Co.  
Standard Chain Co.

**CHAINS, DERRICK.**  
Jones & Laughlin Steel Co.  
McKay, James & Co.  
Standard Chain Co.

**CHAINS, DOG.**  
Standard Chain Co.

**CHAINS, DREDGE.**  
American Bridge Co.  
Carter Iron Co.  
Jones & Laughlin Steel Co.  
Monongahela Iron & Steel Co.  
Nicholson & Co. (Hand made.)  
McKay, James & Co.  
Patterson, W. W. Co.  
Standard Chain Co.

**CHAINS, ELEVATOR.**  
McKay, James & Co.

**CHAINS, FORGED, HAND.**  
Jones & Laughlin Steel Co.

**CHAINS, FOUNDRY.**  
Monongahela Iron & Steel Co.

**CHAINS, GALVANIZED.**  
Standard Chain Co.

**CHAINS, HAND MADE.**  
Nicholson & Co.  
Turner, C. A., Inc.

**CHAINS, HALTER.**  
Standard Chain Co.

**CHAINS, HARNESS.**  
Standard Chain Co.

**CHAINS, HEEL.**  
Standard Chain Co.

**CHAINS, HITCHING.**  
McKay, James & Co.

**CHAINS, HOBBLE.**  
Standard Chain Co.

**CHAINS, HOG.**  
Pittsburgh Rivet Co.

**CHAINS, LINK BELT.**  
Franklin Park Foundry (Malleable.)  
Jones & Laughlin Steel Co. (Stud and  
twisted.)  
Lanz, M. & Son.  
Standard Chain Co.

**CHAINS, LOG.**  
Jones & Laughlin Steel Co  
McKay, James & Co.  
Standard Chain Co.

**CHAINS, LUMBER.**  
Standard Chain Co.

**CHAINS, MACHINE.**  
Standard Chain Co.

**CHAINS, MARINE.**  
American Bridge Co.  
Standard Chain Co.

**CHAINS, PULLEY.**  
McKay, James & Co.  
Standard Chain Co.

**CHAINS, PUMP, GALVANIZED.**  
Garland Nut & Rivet Co.

**CHAINS, RAFTING.**  
Jones & Laughlin Steel Co.

**CHAINS, RAILROAD.**  
Carter Iron Co.  
Jones & Laughlin Steel Co.  
Monongahela Iron & Steel Co.  
McKay, James & Co.  
Standard Chain Co.

**CHAINS, REIN.**  
Standard Chain Co.

**CHAINS, SAFETY.**  
McKay, James & Co.  
Jones & Laughlin Steel Co. (Brake.)  
Standard Chain Co.

**CHAINS, SHIP.**

Standard Chain Co.

**CHAINS, SLING.**Jones & Laughlin Steel Co.  
McKay, James & Co.  
Nicholson & Co.  
Standard Chain Co.**CHAINS, SPECIAL.**Jones & Laughlin Steel Co.  
McKay, James & Co.  
Nicholson & Co.  
Standard Chain Co.**CHAINS, SPROCKET WHEEL.**Jones & Laughlin Steel Co.  
Standard Chain Co.**CHAINS, STEAM SHOVEL.**Jones & Laughlin Steel Co.  
McKay, James & Co.  
Nicholson & Co. (Hand made.)  
Patterson, W. W. Co.  
Standard Chain Co.**CHAINS, STONE.**

McKay, James &amp; Co.

**CHAINS, STUD LINK.**Jones & Laughlin Steel Co.  
Standard Chain Co.**CHAINS, SWITCH.**

Jones &amp; Laughlin Steel Co.

**CHAINS, TACKLE BLOCK.**McKay, James & Co.  
Pittsburgh Block & Mfg. Co.  
Standard Chain Co.**CHAINS, TIE OUT.**

Standard Chain Co.

**CHAINS, TOW.**

Jones &amp; Laughlin Steel Co.

**CHAINS, TRACE.**

Standard Chain Co.

**CHAINS, WAGON.**Jones & Laughlin Steel Co.  
McKay, James & Co.  
Standard Chain Co.**CHAINS, WELDED.**

Standard Chain Co.

**CHAINS, WELL.**Garland Nut & Rivet Co.  
Standard Chain Co.**CHAINS, WRECKING.**Carter Iron Co.  
Monongahela Iron & Steel Co.  
McKay, James & Co.  
Standard Chain Co.**CHAIRS, CHURCH PULPIT.**

Kittanning Church Seating Co.

**CHAIRS, FOLDING.**

Stevens Chair Co.

**CHAIRS, INVALID.**

Stevens Chair Co.

**CHAIRS, IRON LAWN.**

Rieger Iron and Wire Works.

**CHAIRS, LAWN, IRON AND WIRE.**

Rieger Iron &amp; Wire Works.

**CHAIRS, ROLLING.**

Stevens Chair Co.

**CHAIRS, WHEEL.**

Stevens Chair Co.

**CHAIRS, WIRE LAWN.**

Rieger Iron &amp; Wire Works.

**CHAMBERS, AIR.**

Scaife, William B. &amp; Sons Co.

**CHAMBERS, BED ROOM.**

Dunlap, John Co. (Enamored seam-less.)

**CHAMBERS, PUMP.**

Scaife, William B. &amp; Sons Co.

**CHAMBERS, PLUMBERS'.**

Scaife, William B. &amp; Sons Co.

**CHANDELIER, GAS.**

Cullen &amp; Brody.

**CHANDELIER, ELECTRIC.**

Cullen &amp; Brody.

**CHANDELIER, COMBINATION GAS AND ELECTRIC.**

Cullen &amp; Brody.

**CHANDELIER, SPECIAL.**

Woodworth Chandelier Co.

**CHANNELS, IRON.**Carnegie Steel Co.  
Lockhart Iron & Steel Co.  
Oliver & Snyder Steel Co.  
Republic Iron & Steel Co.**CHANNELS, STEEL.**Carnegie Steel Co.  
Eichleay, John Jr., Co.  
Jones & Laughlin Steel Co.  
Lockhart Iron & Steel Co.  
Republic Iron & Steel Co.**CHAPLETS, FOUNDRY.**

Gem Mfg. Co.

**CHARCOAL.**

McCormack, J. S. Co.

**CHECKS, BAGGAGE.**Matthews, James H. & Co.  
Pannier Bros. Stamp Co.**CHECKS, BURNER, INCANDESCENT.**

Frederick-Elder Co., The.

**CHECKS, CROCKER.**

Evans Mfg. Co., The.

**CHECKS, EMPLOYES'.**

Matthews, James H. &amp; Co.

**CHECKS, KEY, FOR HOTELS AND CLUBS.**Matthews, James H. & Co.  
Pannier Bros. Stamp Co.**CHECKS, TIME, EMPLOYES'.**Matthews, James H. & Co.  
Pannier Bros. Stamp Co.**CHECKS, PACKER.**

Evans Mfg. Co., The.

**CHECKS, TOOL.**

Matthews, James H. &amp; Co.

**CHECKS, TRADE.**

Pannier Bros. Stamp Co.

**CHECKS, TRAY.**

Matthews, James H. &amp; Co.

**CHECKS, METAL.**

Matthews, James H. &amp; Co.

**CHEMICALS.**

Ball Chemical Co.

Crown Chemical Co. (Oxide.)

Finkell-Hachmeister Chemical Co.

Hollander Bros. Drug Co.

Pittsburgh Fluid Co.

Pittsburgh Physicians Supply Co.

Republic Chemical Co.

Rodman Chemical Co.

Scaife, William B. &amp; Sons Co.

Scientific Materials Co.

Zemmer Co., The.

Fort Pitt Chemical Co.

Parker-Brown Co.

Vanadium Chemical Co.

**CHEMICALS, FOR CASE HARDENING AND HEAT TREATMENT OF STEELS.**

Rodman Chemical Co.

**CHEMICALS, ELECTRIC PLATERS'.**

Finkell-Hachmeister Chemical Co.

**CHEMICALS, EMBALMERS'.**

Finkell-Hachmeister Chemical Co.

Pittsburgh Fluid Co.

**CHEMICALS, GLASS MANUFACTURERS'.**

Finkell-Hachmeister Chemical Co.

**CHEMICALS, GLASS CUTTERS' AND DECORATORS'.**

Finkell-Hachmeister Chemical Co.

**CHEMICALS, GRANITE AND STONE WORKERS'.**

Finkell-Hachmeister Chemical Co.

**CHEMICALS, HEAVY FOR MANUFACTURERS.**

Finkell-Hachmeister Chemical Co.

**CHEMICALS, MEDICAL.**

Hollander Bros. Drug Co.

Zemmer Co., The. (Physicians and druggists.)

**CHEMICALS, PAINT.**

Ball Chemical Co.

Finkell-Hachmeister Chemical Co.

**CHEMICALS, DISINFECTANT.**

Fort Pitt Chemical Co.

**CHEMICALS, PHARMACEUTICAL.**

Pittsburgh Physicians Supply Co.

**CHEMICALS, POTTERS'.**

Finkell-Hachmeister Chemical Co.

**CHEMICALS, TIN WORKS.**

Republic Chemical Co.

**CHEMICALS, WATER PURIFYING.**

Scaife, William B. &amp; Sons.

**CHESTS, BURGLAR PROOF.**

Barnes Safe &amp; Lock Co.

United States Safe Co.

**CHESTS, CORNER, FOR SAFES.**

United States Safe Co.

**CHESTS, TOOL, STONE CUTTERS'.**

Buechel &amp; Davis.

**CHEWING GUM.**

Clark, D. L. Co. The.

**CHIMNEYS, LAMP.**

Consolidated Lamp &amp; Glass Co.

Macbeth-Evans Glass Co.

Mack Glass Co.

Phoenix Glass Co.

**CHIMNEYS, GAS LAMP.**

Consolidated Lamp &amp; Glass Co.

Macbeth-Evans Glass Co.

Phoenix Glass Co.

**CHIMNEYS, IRON AND STEEL, SELF-SUPPORTING.**

Riter-Conley Mfg. Co.

Scaife, William B. &amp; Sons Co.

**CHIMNEYS, STEEL.**

Treadwell Construction Co.

**CHINaware.**

American Glass Specialty Co.

Mayer China Co., The.

**CHINaware, VITRIFIED HOTEL.**

Mayer China Co., The.

**CHINaware, VITRIFIED, DECORATED.**

Mayer China Co., The.

**CHINaware, VITRIFIED, PLAIN.**

Mayer, China Co., The.

**CHIPS, SOAP.**

Strunz, S. &amp; Son.

**CHISELS, BLACKSMITH.**

Hubbard &amp; Co.

Iron City Tool Works.

**CHISELS, BRICK.**

Buechel &amp; Davis.

Hubbard &amp; Co.

Iron City Tool Works.

**CHISELS, CAPE.**

Hubbard &amp; Co.

Iron City Tool Works.

Jackson Bros.

Klein-Logan Co.

Verona Tool Works.

**CHISELS, CHIPPING.**

Hubbard &amp; Co.

Iron City Tool Works. (Hand.)

Klein-Logan Co.

**CHISELS, COLD.**

Hubbard &amp; Co.

Iron City Tool Works.

Jackson Bros.

Klein-Logan Co.

Verona Tool Works.

**CHISELS, CUPOLA TAPPING.**

Iron City Tool Works.

**CHISELS, DIAMOND POINT.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.

**CHISELS, FOUNDRY.**

Iron City Tool Works.

**CHISELS, GOUGE.**

Iron City Tool Works.

**CHISELS, HOT.**

Iron City Tool Works.  
Klein-Logan Co.

**CHISELS, PLUGGING.**

Jackson Bros.

**CHISELS, RAILROAD.**

Iron City Tool Works.

**CHISELS, ROUND NOSE.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan & Co.

**CHISELS, SIDE.**

Hubbard & Co.  
Iron City Tool Works.

**CHISELS, SPLITTING.**

Hubbard & Co.  
Iron City Tool Works.

**CHISELS, STONE CUTTERS'.**

Buechle & Davis.  
Hubbard & Co.  
Iron City Tool Works.  
Jackson Bros.

**CHISELS, TAPPING.**

Iron City Tool Works.

**CHISELS, TRACK.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Verona Tool Works.

**CHISELS, TILE CUTTERS'.**

Jackson Bros.

**CHOCOLATE, ALL KINDS.**

Clark, The D. L. Co.  
Pennsylvania Chocolate Co.

**CHOPPERS, MEAT.**

Gloekler, Bernard.

**CHROME, FERRO.**

Aluminum Co. of America.

**CHUTES, COAL.**

Reiling Mfg. Co.  
Knott & Harker Co.

**CHUTES, COAL, IRON.**

Hanny, Charles G. & Co.

**CHUTES, COAL, IRON AND STEEL.**

Lanz, M. & Son.  
Munroe, R. & Sons.  
Rieseck, P.  
Riter-Conley Mfg. Co.  
Scaife, William B. & Sons Co.

**CHUTES, ORE.**

Riter-Conley Mfg. Co.

**CIGARS.**

Duquesne Cigar Co.  
Frietsch, Charles B. & Bro.  
Goldsmith, L. Bro. & Co.  
Jenkinson, R. W. & Co.  
Murray, Thomas.  
Seybold, John W.  
Slater, John.

**CLAMPS, BASIN.**

Standard Sanitary Mfg. Co.

**CLAMPS, BEAM.**

National Tube Co.

**CLAMPS, BOAT BUILDERS'.**

Patterson, W. W. Co.

**CLAMPS, CABLE, ELECTRIC.**

Standard Underground Cable Co.

**CLAMPS, CROSS ARM.**

Lanz, M. & Sons.

**CLAMPS, GUY.**

Hubbard & Co.  
Lanz, M. & Sons.  
Oliver Iron & Steel Co.  
Westinghouse Electric & Mfg. Co.

**CLAMPS, HYDRANT.**

National Tube Co.

**CLAMPS, MALLEABLE IRON.**

Hubbard & Co.

**CLAMPS, MESSENGER.**

Lanz, M. & Sons.

**CLAMPS, PIPE.**

Hammon Coupler Co.  
National Tube Co.  
Oil Well Supply Co.

**CLAMPS, PLATE.**

Hubbard & Co.

**CLAMPS, POLE.**

Lanz, M. & Sons.  
Oliver Iron & Steel Co.

**CLAMPS, ROPE.**

Lanz, M. & Sons.

**CLAMPS, STALL, MARBLE AND SLATE.**

Standard Sanitary Mfg. Co.

**CLAMPS, STEEL.**

National Tube Co.

**CLAMPS, STRUCTURAL.**

National Tube Co.  
Oliver Iron & Steel Co.

**CLAYS, FIRE.**

American Sewer Pipe Co.  
Harbison-Walker Refractories Co.  
Manown Mfg. Co.  
Union Sewer Pipe Co. (Ground.)  
Willets Co., The. (Products for glass  
manufacturers' use.)

**CLEANERS, BOILER.**

Gem Mfg. Co.  
Scaife, William B. & Sons Co.  
Wolfe Brush Co.

**CLEANERS, BOILER TUBE.**

Liberty Mfg. Co.  
Rosedale Foundry & Machine Co.

**CLEANERS, CANVAS AND BUCKSKIN SHOE.**

New-Knapp Powder Co.

**CLEANERS, CARPET.**

Sanitary Chemical Co.

**CLEANERS, LAUNDRY.**

Sanitary Chemical Co.

**CLEANERS, "LEGNARDS" CLEANSER.**

Royal Mfg. Co.

**CLEANERS, WALL PAPER.**

Becker Chemical Co.

Fuller, A. M. Paste Co.

Sanitary Chemical Co.

**CLEANERS, VACUUM, PORTABLE.**

Hanlon &amp; Wilson.

**CLEVISES, WAGON, STEEL.**

Diamond Forging &amp; Mfg. Co. (Drop forged.)

Oliver Iron &amp; Steel Co.

**CLIPS, AXLE, CARRIAGE AND WAGON.**

Oliver Iron &amp; Steel Co.

**CLIPS, HAME.**

Oliver Iron &amp; Steel Co.

**CLIPS, SINGLETREE.**

Oliver Iron &amp; Steel Co.

**CLIPS, WIRE ROPE.**

Lanz, M. &amp; Sons.

**CLOSETS, AUTOMATIC FLUSH AND HOPPER.**

Standard Sanitary Mfg. Co.

**CLOSETS, FLOOR FLANGE.**

Standard Sanitary Mfg. Co.

**CLOSETS, FROST PROOF.**

Pittsburgh Brass Mfg. Co.

Standard Sanitary Mfg. Co.

**CLOSETS, PRISON.**

Standard Sanitary Mfg. Co.

**CLOSETS, SEAT ACTION FLUSH.**

Pittsburgh Gage &amp; Supply Co.

Standard Sanitary Mfg. Co.

**CLOSETS, TANK, HIGH AND LOW.**

Standard Sanitary Mfg. Co.

**CLOTH, BRASS.**

Rieger Iron &amp; Wire Works.

**CLOTH, BRONZE.**

Rieger Iron &amp; Wire Works.

**CLOTH, INSULATING.**

Pittsburgh Insulating Co.

**CLOTH, IRON.**

Rieger Iron &amp; Wire Works.

**CLOTH, SANITARY WIPING, WASHED.**

Scheinman, I. L. Co. (Substitute for waste.)

**CLOTHING.**

Alpern, D. (Women's skirts.)

Averbach, Henry. (Men's pants.)

Becker Bros. (Pants.)

**CLOTHING.**

Bennett, Hollander &amp; Lewis. (Pants.)

Ferguson, H. B. (Overalls; dress and working shirts.)

Harter-Sigel Co. (Pants.)

Krieger Mfg. Co. (Men's and children's.)

Lehman &amp; Kingsbaker. (Pants.)

London, A. L. &amp; Son. (Pants; children's Indian suits.)

Pittsburgh Dry Goods Co. (Wrappers and aprons.)

Ravich &amp; Fishkin. (Duck pants.)

Sorg Mfg. Co. (Percale and seersucker petticoats.)

**CLUSTERS, ELECTRIC WIRELESS.**

Bailey Reflector Co.

**CLUTCHES, ARC LAMP.**

Westinghouse Electric &amp; Mfg. Co.

**CLUTCHES, AUTOMOBILE.**

Liggett Spring &amp; Axle Co.

**CLUTCHES, REVERSIBLE.**

Butler Engine &amp; Foundry Co.

**COAL PRODUCERS.**

Bessemer Coal &amp; Coke Co. (Bituminous.)

Dilworth Coal Co.

Monongahela River Consolidated Coal &amp; Coke Co.

Pittsburgh Coal Co.

River Coal Co.

United States Coal &amp; Coke Co.

**COATING, CONCRETE EXTERIOR.**

Lawrence, W. W. &amp; Co.

**COATING, CONCRETE AND CEMENT INTERIOR.**

Lawrence, W. W. Co.

**COCA COLA.**

Coca Cola Co.

**COCKS, ACID.**

Kelly &amp; Jones Co., The.

National Tube Co.

**COCKS, AIR.**

Kelly &amp; Jones Co., The.

**COCKS, BALANCE PLUG.**

Golden Anderson Valve Specialty Co.

**COCKS, BALL.**

Flush Tank Meter Co. (W. C.)

Pittsburgh Gage &amp; Supply Co. (W. C.)

Robertshaw Mfg. Co.

Standard Sanitary Mfg. Co. (W. C.)

**COCKS, BLOW OFF.**

Best Mfg. Co.

Chaplan-Fulton Mfg. Co. (Gauge.)

Golden Anderson Valve Specialty Mfg. Co.

**COCKS, BASIN.**

Standard Sanitary Mfg. Co.

**COCKS, BATH.**

Standard Sanitary Mfg. Co.

**COCKS, COMPRESSION.**

Kelly &amp; Jones Mfg. Co., The.

Standard Sanitary Mfg. Co.

**COCKS, CORPORATION.**  
Kelly & Jones Co., The.  
Standard Sanitary Mfg. Co.

**COCKS, CORPORATION, SILL.**  
Standard Sanitary Mfg. Co.

**COCKS, CYLINDER.**  
Kelly & Jones Mfg. Co., The.

**COCKS, CURB.**  
Standard Sanitary Mfg. Co.

**COCKS, FULLER WORK.**  
Standard Sanitary Mfg. Co.

**COCKS, GAS.**  
Kelly & Jones Co., The.  
National Tube Co.  
Standard Sanitary Mfg. Co.  
Pittsburgh Brass Mfg. Co.

**COCKS, GAS METER, BRASS.**  
National Tube Co.

**COCKS, GALVANIZED LARD TANK.**  
Kelly & Jones Mfg. Co., The.

**COCKS, GAUGE.**  
Cadman, A. W. Brass Mfg. Co.  
Chaplin-Fulton Mfg. Co.  
Oil Well Supply Co.

**COCKS, GAUGE, GRINDING, ROTARY.**  
Williams Gauge Co.

**COCKS, GAUGE, LOCOMOTIVE.**  
Pittsburgh Gage & Supply Co.

**COCKS, GAUGE, ROTATING.**  
Pittsburgh Gage & Supply Co.  
("Pittsburgh.")

**COCKS, GROUND KEY.**  
Kelly & Jones Mfg. Co., The.  
Standard Sanitary Mfg. Co.

**COCKS, HYDRAULIC.**  
Pittsburgh Valve Foundry & Construction Co.

**COCKS, IRON AND BRASS GAS METER.**  
National Tube Co.

**COCKS, ROTATING.**  
Pittsburgh Gage & Supply Co.  
Williams Gauge Co.

**COCKS, ROUND WAY.**  
Kelly & Jones Mfg. Co., The.

**COCKS, SCREW OPERATED.**  
Pittsburgh Gage & Supply Co.  
("Caco.")

**COCKS, SHAMPOO.**  
Standard Sanitary Mfg. Co.

**COCKS, SILL.**  
Standard Sanitary Mfg. Co.

**COCKS, STANDARD IRON.**  
National Tube Co.

**COCKS, STEAM.**  
Kelly & Jones Mfg. Co., The.

**COCKS, STOP AND WASTE.**  
Kelly & Jones Mfg. Co., The.  
Standard Sanitary Mfg. Co.

**COCKS, PANTRY.**  
Standard Sanitary Mfg. Co.

**COCKS, TUYERE.**  
Kelly & Jones Mfg. Co., The.  
Pittsburgh Valve Foundry & Construction Co.

**COCKS, UNION.**  
National Tube Co.

**COCOA.**  
Pennsylvania Chocolate Co.

**COILERS, PLATE.**  
Garrison, A. Foundry Co.

**COILERS, SHEET.**  
Garrison, A. Foundry Co.

**COILS, ARMATURE.**  
Crescent Electric & Mfg. Co.  
Doubleday-Hill Electric Co.  
Pittsburgh Armature Works.  
Westinghouse Electric & Mfg. Co.

**COILS, BRASS.**  
Ruud Mfg. Co. (To order.)

**COILS, CHOKE.**  
Westinghouse Electric & Mfg. Co.

**COILS, COPPER.**  
Ruud Mfg. Co. (To specifications.)

**COILS, COPPER COOLING.**  
Stender Coppersmith Co., The.

**COILS, FIELD.**  
Crescent Electric & Mfg. Co.  
Doubleday-Hill Electric Co.  
Pittsburgh Armature Works.  
Westinghouse Electric & Mfg. Co.

**COILS, HEATING, COPPER.**  
Stender Coppersmith Co., The.

**COILS, KICKING.**  
Westinghouse Electric & Mfg. Co.

**COILS, ORNAMENTAL.**  
National Tube Co.

**COILS, PIPE.**  
Best Mfg. Co.  
Oil Well Supply Co.

**COILS, RESISTANCE.**  
Westinghouse Electric & Mfg. Co.

**COILS, SPARK.**  
Westinghouse Electric & Mfg. Co.

**COKE.**  
Bessemer Coal & Coke Co.  
Duquesne Coke Co.  
Frick, H. C. Coke Co.  
Globe Coal & Coke Co.  
Monongahela River Consolidated Coal & Coke Co.  
Pittsburgh-Buffalo Co.  
Pittsburgh Coal Co.  
United States Coal & Coke Co.

**COLLARS, CAST IRON AND STEEL.**  
Jones & Laughlin Steel Co.

**COLORS, CAR.**  
Lawrence, W. W. & Co.

**COLORS, CARRIAGE.**

Lawrence, W. W. &amp; Co.

**COLORS, COACH.**

Lawrence, W. W. &amp; Co.

**COLORS, DRY.**Atlas Paint Co. (Mortar.)  
Pittsburgh Iron Paint Co.**COLORS, ENAMEL.**

Vitro Mfg. Co.

**COLORS, GROUND IN OIL.**Lucas, John & Co.  
Nevin, T. H. Co.  
Painter, Joel T. Co.**COLORS, OIL.**

Eagle Paint &amp; Varnish Co.

**COLORS, PAINT.**

Wheeler, Henry &amp; Son.

**COLORS, MORTAR.**Atlas Paint Co. (Pulp and dry.)  
Pittsburgh Iron Paint Co. (Pulp and dry.)**COLORS, STRIPING.**

Lawrence, W. W. &amp; Co.

**COLUMNS, IRON.**

Pittsburgh Bridge &amp; Iron Co.

**COLUMNS, IRON LATTICE.**

Riter-Conley Mfg. Co.

**COLUMNS, IRON BUILDING, CAST.**

Taylor-Wilson Mfg. Co.

**COLUMNS, IRON AND STEEL.**

Carnegie Steel Co.

**COLUMNS, GAUGE, STEAM AND WATER.**

National Tube Co.

**COLUMNS, PORCH, WOOD.**Commercial Sash & Door Co. (Colonial.)  
Edgecomb, W. H. & Son.  
Pittsburgh Hardwood Door Co.  
Schwerd, A. F.  
Wilkinsburg Stair Co.**COLUMNS, WATER, COMBINATION.**

Kelly &amp; Jones Mfg. Co., The.

**COLUMNS, WATER, SAFETY.**

Pittsburgh Gage &amp; Supply Co.

**COMBS, PAINTERS' GRAINING.**Lucas, John & Co.  
Wolfe Brush Co.**COMMUTATORS, ELECTRIC.**Doubleday-Hill Electric Co.  
Pittsburgh Armature Works.  
Pittsburgh Electric & Machine Works.  
Union Electric Co.  
Westinghouse Electric & Mfg. Co.**COMPOUNDS, AUTOMOBILE.**

Eagle Lubricating Oil Co.

**COMPOUNDS, BOILER.**American Supply Co.  
Giebel, Victor & Co.  
Williams, Joseph Co.**COMPOUNDS, CASE HARDENING.**Rodman Chemical Co. ("Carbo" and  
"Bull Dog.")**COMPOUNDS, CORE, FOR FOUNDRIES.**

Obermayer, The S. Co.

**COMPOUNDS, DUST LAYING.**Gulf Refining Co.  
Wadsworth Stone & Paving Co.**COMPOUNDS, ELECTRIC INSULATING.**Benolite Co.  
Sterling Varnish Co.**COMPOUNDS, INSULATING, OZITE, FOR TERMINALS AND JUNCTION BOXES.**

Standard Underground Cable Co.

**COMPOUNDS, TALLOW.**

Duquesne Oil &amp; Supply Co.

**COMPOUNDS, TIN MANUFACTURING.**

Republic Chemical Co.

**COMPOUNDS, WASHING.**

"Call Again" Washing Compound Co.

**COMPRESSORS, AIR.**American Electric Air Pump Co.  
Hall Steam Pump Co.  
Lawrenceville Machine Co. (For saloon  
pumps.)  
Mackintosh-Hemphill Co.  
Mesta Machine Co.  
Tillinghast, B. D.  
Tranter Mfg. Co.  
Tuckey Bros. (Belt.)  
Westinghouse Air Brake Co.  
Wilson-Snyder Mfg. Co.**COMPRESSORS, GAS.**Hall Steam Pump Co.  
Tillinghast, B. D.  
Westinghouse Air Brake Co.  
Wilson-Snyder Mfg. Co.**CONCRETE CONSTRUCTION.**Cranford Construction Co.  
North Side Concrete Co.**CONCRETE CORNICE AND COPING.**

Concrete Products Co.

**CONCRETE CURB STONE.**

Concrete Products Co.

**CONCRETE PRODUCTS FOR REINFORCING.**American Steel & Wire Co.  
Electric Welding Co. (Cummings  
system.)  
Page Woven Wire Fence Co.**CONCRETE SEWER PIPE.**

Concrete Products Co.

**CONDENSERS, BOILER FEED.**

Epping-Carpenter Co.

**CONDENSERS, ELECTRIC.**

Westinghouse Electric &amp; Mfg. Co.

**CONDENSERS, HYDRAULIC.**

Epping-Carpenter Co.

**CONDENSERS, JET AND SURFACE, FOR WATER WORKS.**

Epping-Carpenter Co.

**CONDENSERS, STEAM.**

Hall Steam Pump Co. (Also air.)  
 Mesta Machine Co.  
 Riter-Conley Mfg. Co.  
 Westinghouse Machine Co.

**CONDENSERS, SURFACE AND JET.**

Epping-Carpenter Co. (For water works.)

**CONDUCTORS, ARMORED.**

National Metal Molding Co.  
 Safety Armorite Conduit Co.  
 Standard Underground Cable Co.

**CONDUCTORS, LIGHTNING.**

Kress, George R. Co.

**CONDUITS, BLACK AND RED OVER GALVANIZED.**

Central Tube Co.

**CONDUITS, BLACK.**

Central Tube Co.

**CONDUITS, CLAY.**

National Fireproofing Co.

**CONDUITS, ELECTRIC, UNDERGROUND, VITRIFIED.**

American Sewer Pipe Co.  
 Safety Armorite Conduit Co.

**CONDUITS, ENAMELED, RIGID STEEL.**

American Conduit Mfg. Co. ("American.")  
 Enameled Metals Co.

**CONDUITS, FLEXIBLE.**

National Metal Molding Co.  
 Safety Armorite Conduit Co.

**CONDUITS, GALVANIZED.**

American Conduit Mfg. Co. ("Galvanite" for interior.)  
 Enameled Metals Co.

**CONDUITS, IRON.**

National Metal Molding Co.

**CONDUITS, NON-METALLIC.**

American Conduit Mfg. Co. ("Wire-duct.")

**CONDUITS, INTERIOR.**

Safety Armorite Conduit Co.

**CONDUITS, RED.**

Central Tube Co.

**CONDUITS, RIGID.**

Safety Armorite Conduit Co.

**CONDUITS, UNDERGROUND.**

American Sewer Pipe Co. (Vitrified electric.)  
 National Fire Proofing Co.

**CONDUITS, WHITE.**

Central Tube Co.

**CONFETIONS.**

Clark, The D. L. Co.  
 Reymer & Bro.

**CONNECTIONS, BASIN COCK.**

Standard Sanitary Mfg. Co.

**CONNECTIONS, DRAINAGE, ROOF.**

Kelly & Jones Mfg. Co., The.

**CONNECTIONS, DRAINAGE, MALLEABLE IRON.**

Kelly & Jones Mfg. Co., The.

**CONNECTIONS, DRAINAGE, TUCKER.**

Kelly & Jones Mfg. Co., The.

**CONNECTIONS, HOSE.**

Standard Sanitary Mfg. Co.

**CONNECTIONS, PIPE LINE.**

Hammon Coupler Co.

**CONNECTIONS, SINK.**

Standard Sanitary Mfg. Co.

**CONNECTIONS, SOLDERING.**

Standard Sanitary Mfg. Co.

**CONNECTORS, CABLE, ELECTRIC.**

Westinghouse Electric & Mfg. Co.

**CONNECTORS, ELECTRIC WIRE.**

Hubbard & Co. (Testing.)

Standard Underground Cable Co.

Westinghouse Electric & Mfg. Co.

**CONSTRUCTION, IRON AND STEEL.**

Kratzer, W. N. & Co. (Buildings and houses.)

McClinic-Marshall Construction Co. (All kinds buildings.)

Riter-Conley Mfg. Co. (Buildings.)

Scaife, William B. & Sons. Co. (Buildings.)

**CONES, ICE CREAM.**

American Automatic Mfg. & Baking Co.

**CONTAINERS, STEEL, FOR SHIPPING.**

Pittsburgh Can Co. (Lead, paint and chemicals.)

**CONTROLLERS, CRANE, ELECTRIC.**

Westinghouse Electric & Mfg. Co.

**CONTROLLERS, ELEVATOR, ELECTRIC.**

Westinghouse Electric & Mfg. Co.

**CONTROLLERS, FAN, ELECTRIC.**

Westinghouse Electric & Mfg. Co.

**CONTROLLERS, PRINTING PRESS.**

Westinghouse Electric & Mfg. Co.

**CONTROLLERS, PUMP.**

Westinghouse Electric & Mfg. Co.

**CONTROLLERS, MISCELLANEOUS ELECTRIC.**

Westinghouse Electric & Mfg. Co.

**CONVERTERS, BESSEMER STEEL.**

Carroll-Porter Boiler & Tank Co.

Riter-Conley Mfg. Co.

**CONVERTERS, ELECTRIC, INDUCTION COIL.**

Westinghouse Electric & Mfg. Co.

**CONVEYORS, BILLET.**

Garrison, A. Foundry Co.

**CONVEYORS, LABOR SAVING.**

Heyl & Patterson. (Automatic.)

**CONVEYORS, ROLLING MILL.**

Garrison, A. Foundry Co.

Heyl & Patterson. (Automatic.)

Taylor-Wilson Mfg. Co.

United Engineering & Foundry Co.

**COOLERS, HOTEL KITCHEN FOOD.** Demmler & Schenck.

**COOLERS, LARD.** Gloekler, Bernard Co.

**COPING, CONCRETE.** Concrete Products Co.

**COPING, WALL.** American Sewer Pipe Co. Union Sewer Pipe Co.

**COPPER, ARCHITECTURAL WORK.** McIlroy, J. D. & Son. Stender Coppersmith Co., The.

**COPPER, BAR.** Crucible Steel Co.

**COPPER, CAKE.** Crucible Steel Co.

**COPPER CASTINGS.** Bronze Age Metal Co.

**COPPER, COMMUTATOR.** Kidd Bros. & Burgher Steel Wire Co.

**COPPER, INGOT.** Bell Bros. Crucible Steel Co.

**COPPER FIXTURES.** McKenna Bros. Brass Co.

**COPPER, PHOSPHORIZED.** Damascus Bronze Co.

**COPPER, SHEET.** Crucible Steel Co. Hussey, C. G. & Co. (All finishes and shapes.)

**COPPER, SHEET, WORK IN.** Angermyer, W. F. Co. Marvel Burner Co. Miller, S. J. Nobbs, Grant C. & Co. O'Leary, J. B. Stender Coppersmith Co., The.

**COPPER, SILICON.** Damascus Bronze Co.

**COPPER SPECIALTIES.** Adams Bros. Mfg. Co.

**COPPER, SULPHATE.** Pennsylvania Salt Mfg. Co. (Bluestone.)

**CORD, SASH.** Commercial Sash & Door Co.

**CORD, SWITCHBOARD.** Standard Underground Cable Co.

**CORD, TELEPHONE.** Standard Underground Cable Co.

**CORDIALS, MEDICINAL.** Hostetter Co.

**CORK, GRANULATED.** Armstrong Cork Co.

**CORK, PAPER.** Armstrong Cork Co.

**CORK SPECIALTIES.** Armstrong Cork Co.

**CORKS, CROWN.** Banar Cork Co.

**CORKBOARD, FOR INSULATING COLD STORAGE ROOMS.** Armstrong Cork Co.

**CORNICES, CONCRETE.** Concrete Products Co.

**CORNICES, COPPER.** Pittsburgh Cornice & Roofing Co.

**CORNICES, IRON, GALVANIZED.** Pittsburgh Cornice & Roofing Co.

**CORNICES, METAL.** Acme Cornice, Skylight & Roofing Co. Irwin, Thomas W. Mfg. Co. Keighley, S. Metal Ceiling Mfg. Co. Rasner & Dinger Co. Rome, George & Co. Scholes Bros.

**COTS, CRADLES AND CRIBS.** Diamond Mattress Co. Gross, H. E. & Co. Fort Pitt Bedding Co. Logan, A. J. Co. Pittsburgh Metal Bed Co.

**COTTERS, SPRING.** American Spiral Spring & Mfg. Co.

**COUCHES.** Fort Pitt Bedding Co. Gross, H. E. & Co. Pittsburgh-Hickson Co. Pittsburgh Iron Folding Bed Co. Victor Spring Bed Co.

**COULTERS.** Carnegie Plow & Mfg. Co.

**COUNTERS, BANK.** Kates & Co.

**COUNTERS, OFFICES.** Kates & Co.

**COUNTERS, STORE.** Kates & Co.

**COUNTERS, WRAPPING, FOR STORES OF ALL KINDS.** McLean, W. B. Mfg. Co.

**COUNTERS, WOOD, HIGH GRADE.** Diebold Lumber Co. (All kinds.)

**COUNTERSHAFTS.** Gem Mfg. Co.

**COUNTERSINKS.** Jackson Bros.

**COUPLERS, CAR.** Carnegie Steel Co. McConway-Torley Co. (Automatic.) National Tube Co. Pennsylvania Malleable Co. Pittsburgh Steel Foundry Co.

**COUPLERS, GAS MAIN.** Hammon Coupler Co.

## COMMODITIES

|   |  |
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| <b>COUPLINGS, CAR HEATER, BRASS, CAST AND WROUGHT IRON.</b>   | <b>COVERINGS, PIPE.</b>  |
| Kelly & Jones Mfg. Co., The.<br>National Tube Co. (Cast and wrought.)   | Armstrong Cork Co. (Cork.)<br>Pittsburgh Valve Foundry & Construction Co.              |
| <b>COUPLINGS, CAR, MINE.</b>  | <b>COVERINGS, WATERPROOF.</b>  |
| McKay, James & Co.<br>Standard Chain Co.  | Pittsburgh Waterproof Co.  |
| <b>COUPLINGS, CLUTCH.</b>   | <b>COVERS, AUTOMOBILE.</b>   |
| Jones & Laughlin Steel Co.<br>Standard Gauge Steel Co. (Friction.)  | Pittsburgh Awning Co.  |
| <b>COUPLINGS, COKE OVEN VALVE.</b>  | <b>COVERS, CAKE, GLASS.</b>  |
| Kelly & Jones Mfg. Co., The.  | Co-operative Flint Glass Co.   |
| <b>COUPLINGS, COLLINS.</b>  | <b>COVERS, CANVAS.</b>   |
| Jones & Laughlin Steel Co.  | Pittsburgh Awning Co.  |
| <b>COUPLINGS, COMPRESSION.</b>  | <b>COVERS, CHEESE, GLASS.</b>  |
| Jones & Laughlin Steel Co. (Split.)<br>Standard Gauge Steel Co. (Shaft.)  | Co-operative Flint Glass Co.   |
| <b>COUPLINGS, CONDUIT.</b>  | <b>COVERS, CRUCIBLE.</b>   |
| Enamelled Metals Co. (Enamelled and galvanized.)<br>American Conduit Mfg. Co.<br>National Metal Molding Co.<br>Safety Armorite Conduit Co.  | McCullough-Dalzell Crucible Co.  |
| <b>COUPLINGS, DRAINAGE.</b>   | <b>COVERS, FREIGHT CAR SHIPPING.</b>   |
| Kelly & Jones Mfg. Co., The.  | Pittsburgh Awning Co.  |
| <b>COUPLINGS, DRILL ROD.</b>  | <b>COVERS, GEAR.</b>   |
| National Tube Co.   | Standard Sheet Metal Mfg. Co.  |
| <b>COUPLINGS, DROP FORGED WAGON PLATFORM BODY.</b>  | <b>COVERS, HORSE AND WAGON.</b>  |
| Diamond Forging & Mfg. Co.  | Brown & Co.<br>Dreesen, William.<br>Mamaux Awning & Tent Co.<br>Pittsburgh Awning Co.  |
| <b>COUPLINGS, FLANGE.</b>   | <b>COVERS, MANHOLE.</b>  |
| Jones & Laughlin Steel Co.  | Carlin's, Thomas Sons.<br>Munroe, R. & Sons.<br>Velté Foundry & Machine Co.            |
| <b>COUPLINGS, HOSE.</b>   | <b>COVERS, PARAFFINED, CONTRACTORS'.</b>   |
| Kelly & Jones Mfg. Co., The.<br>Lawrenceville Bronze Co.<br>Oil Well Supply Co.   | Pittsburgh Awning Co.  |
| <b>COUPLINGS, PIPE.</b>   | <b>COVERS, PIANO.</b>  |
| Central Tube Co. (White, red or black.)<br>Kelly & Jones Mfg. Co., The.<br>Lawrenceville Bronze Co.<br>National Tube Co.<br>Pittsburgh Valve Foundry & Construction Co.<br>Standard Sanitary Mfg. Co. | Pittsburgh Awning Co.  |
| <b>COUPLINGS, ROD, DRILL.</b>   | <b>COVERS, VENEER BASKET.</b>  |
| National Tube Co.   | Steel, E. T. & Son.  |
| <b>COUPLINGS, PUMP.</b>   | <b>COVERS, WATERPROOF.</b>   |
| Keystone Driller Co.<br>National Tube Co.   | Brown & Co.<br>Dreesen, William.<br>Mamaux Awning & Tent Co.<br>Pittsburgh Awning Co.  |
| <b>COUPLINGS, SHAFT.</b>  | <b>CRABS, POLE.</b>  |
| Diamond Forging & Mfg. Co.<br>Standard Gauge Steel Co.<br>Tranter Mfg. Co.  | Oliver Iron & Steel Co.  |
| <b>COUPLINGS, UNIVERSAL.</b>  | <b>CRACKLINGS.</b>   |
| Jones & Laughlin Steel Co.  | Pennsylvania Hide & Leather Co.  |
| <b>COUPLINGS, WIRE ROPE.</b>  | <b>CRANES, HYDRAULIC.</b>  |
| Turner, C. A., Inc.   | Garrison, A. Foundry Co.<br>Taylor-Wilson Mfg. Co.<br>United Engineering & Foundry Co. |
| <b>COVERINGS, BOILER.</b>   | <b>CRANES, HYDRAULIC JIB.</b>  |
| Armstrong Cork Co. (Cork.)<br>Pittsburgh Valve Foundry & Construction Co.   | Taylor-Wilson Mfg. Co.   |
|   | <b>CRANES, JIB.</b>  |
|   | Riter-Conley Mfg. Co.  |
|   | <b>CRANES, LADLE.</b>  |
|   | Garrison, A. Foundry Co.   |
|   | <b>CRANES, TRANSFER.</b>   |
|   | Garrison, A. Foundry Co.   |
|   | <b>CRANKS, AUGER.</b>  |
|   | Hubbard & Co.  |

|   |   |
|---|---|
| <b>CRASH, FLOOR.</b><br>Pittsburgh Awning Co.   | <b>CUPS, DRINKING, DEEP.</b><br>Dunlap, John Co.                                    |
| <b>CRATES, BERRY PACKING.</b><br>Steel, E. T. & Sons.   | <b>CUPS ENAMELED.</b><br>Dunlap, John Co.   |
| <b>CREAM, COLD.</b><br>Becker Chemical Co.<br>Hangsterfer, G. Chemical Co.  | <b>CUPS, FORCE.</b><br>Pennsylvania Rubber Co.                                      |
| <b>CREAM, MASSAGE.</b><br>Becker Chemical Co.   | <b>CUPS, GOLF.</b><br>Gem Mfg. Co.  |
| <b>CREEPERS, ANTI RAIL.</b><br>Oliver Iron & Steel Co.  | <b>CUPS, GREASE.</b><br>Kelly & Jones Mfg. Co., The                                 |
| <b>CREEPERS, HARDWOOD, FOR GARAGES.</b><br>Keystone Wire Matting Co.  | <b>CUPS, OIL.</b><br>Kelly & Jones Mfg. Co., The.                                   |
| <b>CRESTING.</b><br>Hanny, Charles G. & Co.   | <b>CUPS, PUMPING, DEEP WELL.</b><br>Keystone Machine Co.                            |
| <b>CROCKERY. (Dishes, Pans, Saucers, Vases, Flower Pots.)</b><br>Elverson, W. H. Pottery Co.  | <b>CUPS, LEATHER.</b><br>Oil Well Supply Co.  |
| <b>CROSSES, IRON, CAST AND MALLEABLE.</b><br>National Tube Co.  | <b>CUPS, SEAMLESS, AND STRAIGHT SEAMED.</b><br>Dunlap, John Co.                     |
| <b>CRUCIBLES. (Plumbago, Graphite, Clay-lined, Teeming.)</b><br>McCullough-Dalzell Crucible Co.   | <b>CUSHIONS, CHURCH SEATING.</b><br>Logan, A. J. Co.                                |
| <b>CRUSHERS, COAL.</b><br>Milholland, J. & J. B.  | <b>CUSHIONS, DOWN.</b><br>Logan, A. J. & Co.  |
| <b>CRUSHERS, COKE.</b><br>Milholland, J. & J. B.  | <b>CUSHIONS, HYDRAULIC SPRING.</b><br>Pittsburgh Valve Foundry & Construction Co.   |
| <b>CRUSHERS, ORE.</b><br>Lawrence Iron & Steel Foundry Co.<br>Phillips & McLarin Co.<br>United Engineering & Foundry Co.                      | <b>CUSHIONS, WINDOW SEATING.</b><br>Logan, A. J. Co.                                |
| <b>CRUSHERS, ROCK.</b><br>Lawrence Iron & Steel Foundry Co.<br>(Black.)<br>Phillips & McLarin Co.   | <b>CUSPIDORS, BRASS.</b><br>McKenna Bros. Brass Co.                                 |
| <b>CRUTCHES.</b><br>Feick Bros. Co.   | <b>CUSPIDORS, ENAMELED.</b><br>Dunlap, John Co.                                     |
| <b>CRYOLITE.</b><br>Vitro Mfg. Co.  | <b>CUT-OFFS, COPPER.</b><br>Hussey, C. G. & Co.                                     |
| <b>CRYSTALLIZERS.</b><br>Treadwell Construction Co.   | <b>CUT-OUTS, ARC AND INCANDESCENT LAMPS.</b><br>Westinghouse Electric & Mfg. Co.    |
| <b>CULVERTS, CAST IRON AND STEEL.</b><br>Scaife, William B. & Sons Co.  | <b>CUT-OUTS, ELECTROLIER.</b><br>Westinghouse Electric & Mfg. Co.                   |
| <b>CUPOLAS, FOUNDRY.</b><br>Carlins, Thomas Sons Co.<br>Carroll-Porter Boiler & Tank Co.<br>McNeil, James & Bro. Co.<br>Riter-Conley Mfg. Co. | <b>CUT-OUTS, TRANSFORMER, ELECTRIC.</b><br>Westinghouse Electric & Mfg. Co.         |
| <b>CUPS, BABY FOOD.</b><br>Dunlap, John Co.   | <b>CUTS, AUTOGRAPH, WOOD.</b><br>Pannier Bros. Stamp Co.                            |
| <b>CUPS, BIRD-SEED.</b><br>Co-operative Flint Glass Co.   | <b>CUTTERS, CARBON, ARC LIGHT.</b><br>Westinghouse Electric & Mfg. Co.              |
| <b>CUPS, DEEP WELL PUMPING.</b><br>Keystone Machine Co. (For oil or water.)   | <b>CUTTERS, CASING.</b><br>Tillinghast, B. D.                                       |
| <b>CUPS, DIPPING.</b><br>McCullough-Dalzell Crucible Co.  | <b>CUTTERS, GOLF CUP HOLE.</b><br>Gem Mfg. Co.                                      |
|   | <b>CUTTERS, MACHINE MOULDING.</b><br>Emerson-Smith & Co.                            |
|   | <b>CUTTERS, PIPE.</b><br>Taylor-Wilson Mfg. Co.<br>United Engineering & Foundry Co. |

**CUTTERS, SAW GUMMER.**  
Ajax Mfg. Co.

**CUTTERS, TOOL, ASPHALT.**  
Oliver Iron & Steel Co.

**CUTTERS, TUBE.**  
Taylor-Wilson Mfg. Co.

**CYLINDERS.**  
McCullough-Dalzell Crucible Co.  
Seafe, William B. & Sons Co.

**CYLINDERS, AIR.**  
Air Tight Steel Tank Co.  
Hall Steam Pump Co.

**CYLINDERS, AMMONIA.**  
National Tube Co.

**CYLINDERS, CREOSOTING.**  
Treadwell Construction Co.

**CYLINDERS, ENGINE, GAS.**  
Butler Engine & Foundry Co.  
Keystone Machine Co. (With reversible clutch.)  
Tillinghast, B. D.

**CYLINDERS, FOR STEAM ENGINE BED PLATES.**  
Tillinghast, B. D.

**CYLINDERS, GAS.**  
Air Tight Steel Tank Co.  
National Tube Co.

**CYLINDERS, HYDRAULIC.**  
Treadwell Construction Co.

**CYLINDERS, REBORING.**  
Renton, William.

**CYLINDERS, VANADIUM STEEL.**  
American Vanadium Co.

**CYLINDERS, WELL.**  
Keystone Driller Co.

**DAMPERS, CHIMNEY.**  
Superior Mfg. Co.

**DAMPERS, LOCKING.**  
McGinness Co., The.

**DAVENPORTS.**  
Gross, H. E. & Co.

**DECANTERS, GLASS.**  
American Glass Specialty Co. (Cut and lettered.)  
Co-operative Flint Glass Co.  
Fidelity Glass Co.  
United States Glass Co. (Pressed or blown.)

**DECORATIONS.**  
Dreesen, William.  
Mamaux Awning & Tent Co.

**DERRICKS, CONTRACTORS'.**  
Carlin's, Thomas Sons Co.

**DERRICKS, OIL.**  
Carnegie Steel Co. (Steel.)

**DERRICKS, PILE DRIVING.**  
Carlin Machinery & Supply Co.  
Carlin's, Thomas Sons & Co.

**DERRICKS, STEEL.**  
Eichleay, John Jr., Co.

**DESKS, OFFICE.**  
Kates & Co.

**DESKS, READING, FOR CHURCH STUDIES.**  
Kittanning Church Seating Co.

**DESKS, STORE ROOM.**  
Kates & Co.

**DETECTORS, ELECTRIC GROUND.**  
Westinghouse Electric & Mfg. Co.

**DETINNING, PLATS FOR**  
Republic Chemical Co.

**DEVICES, HEATING.**  
McGinness Co., The.

**DEVICES, LUBRICATION.**  
Pittsburgh Gage & Supply Co. ("White Star.")

**DEVICES, OIL RECOVERY.**  
Pittsburgh Gage & Supply Co.

**DEVICES, STIRRING, WATER AND CHEMICAL.**  
Gillespie Mfg. Co.

**DEVICES, VENTILATING.**  
McGinness Co., The.

**DEVICES, WIRE REELING.**  
Gillespie Mfg. Co.

**DIALS, METER.**  
Ingram-Richardson Mfg. Co.

**DIAPHRAGMS, RUBBER.**  
Pennsylvania Rubber Co.

**DIES, BELL.**  
Cyclops Foundry Co.  
Pittsburgh Iron & Steel Foundries Co.

**DIES, BENDING.**  
Pittsburgh Iron & Steel Foundries Co.

**DIES, BLANKING.**  
Tretheway, Samuel & Co., Ltd.  
Wilhelm, Robert.

**DIES, BRICK.**  
Lawrenceville Machine Co.

**DIES, BRASS.**  
Pannier Bros. Stamp Co.

**DIES, CUTTING.**  
Gem Mfg. Co.

**DIES, DRAWING.**  
Pittsburgh Iron & Steel Foundries Co.  
Wilhelm, Robert.

**DIES, DROP FORGING.**  
Crucible Steel Co.  
Garrison, A. Foundry Co.

**DIES, FORMING.**  
Tretheway, Samuel & Co.  
Wilhelm, Robert.

**DIES, GOLD MANUFACTURERS'.**  
Metal Products Co.

**DIES, HAMMER.**  
Garrison, A. Foundry Co.  
Sterrett, Thomas Foundry Co. (Chilled.)

**DIES, METAL STAMPING.**  
Austin Tool & Machine Co.  
Foster, J. C. & Son.  
Hoerle, W. M.

**DIES, PIPE.**  
Standard Engineering Co. (Threading.)  
Taylor-Wilson Mfg. Co.

**DIES, PRINTING, WOOD BOX.**  
Matthews, James H.

**DIES, PUNCHING.**  
Gem Mfg. Co.

**DIES, RUBBER, FOR PRINTING SHEET METAL.**  
Matthews, James H. & Co.  
Pannier Bros. Stamp Co.

**DIES, SILVER MANUFACTURERS'.**  
Metal Products Co.

**DIES, SPECIAL.**  
Gem Mfg. Co.  
Norris Machine Co.

**DIES, STAMPING.**  
Austin Tool & Machine Co.  
Forster, J. C. & Son. (Metal.)  
Gem Mfg. Co.  
Hoerle, W. M. (Metal.)

**DIES, STEEL.**  
Matthews, James H. & Co.

**DIES, SHEET METAL FOR.**  
Wolverine Supply & Mfg. Co.

**DIFFUSERS, CONCENTRIC.**  
Westinghouse Electric & Mfg. Co.

**DIGESTERS, PAPER MAKING.**  
Riter-Conley Mfg. Co.

**DIGGERS, POST HOLE.**  
Hubbard & Co.  
Klein-Logan Co.  
Oliver Iron & Steel Co. (Loop or tamping top.)

**DIPPERS, COPPER, CANDY AND JELLY.**  
Stender Coppersmith Co., The.

**DIPPERS, ENAMELED, COCOA SHAPE.**  
Dunlap, John Co.

**DIPPERS, ENAMELED, FLARING AND WINDSOR.**  
Dunlap, John Co.

**DISCS, ARMATURE,**  
National Tube Co.  
Westinghouse Electric & Machine Co.

**DISCS, AUTOMOBILE CLUTCH.**  
Emerson-Smith & Co.

**DISCS, CORK.**  
Armstrong Cork Co.

**DISCS, HARROW.**  
Crucible Steel Co.

**DISCS, SPECIAL.**  
Firth-Sterling Steel Co.

**DISCS, VALVE, COPPER.**  
National Tube Co.

**DISCS, VALVE, RUBBER.**  
Pennsylvania Rubber Co.

**DISHES, FERN, CROCKERY.**  
Elverson, W. H. Pottery Co.

**DISHES, SOAP.**  
Dunlap, John Co. (Enamelled wall.)  
Standard Sanitary Mfg. Co. (With drain.)

**DISINFECTANTS.**  
Chamberlain Co., The.  
Fort Pitt Chemical Co. ("Sanitary odorless water white.")  
Pittsburgh Fluid Co.

**DISINFECTANTS FOR PIPES.**  
Fort Pitt Chemical Co. ("Chloro Cream.")

**DOGS, CHAIN.**  
Jones & Laughlin Steel Co.  
Standard Chain Co.

**DOGS, RING.**  
Jones & Laughlin Steel Co.  
Standard Chain Co.

**DOGS, STONE.**  
Carlin's, Thomas Sons Co.

**DOGS, TIMBER.**  
Oliver Iron & Steel Co.  
Standard Chain Co.

**DOLLIES, SPRING.**  
Pittsburgh Block & Mfg. Co.

**DOLLIES, TIMBER.**  
Baker, James H. Mfg. Co.  
Standard Scale & Supply Co.

**DOLLIES, TRACK.**  
Pittsburgh Block & Mfg. Co.

**DOMES, MOSAIC LAMP.**  
Semmer, Phillip Co.

**DOMES FOR OBSERVATION.**  
Kratzer, W. N. & Co.

**DOMES, PLUMBAGO.**  
McCullough-Dalzell Crucible Co.

**DOORS, ASH PIT.**  
Lanz, M. & Son.

**DOORS, BRONZE.**  
Tyler, W. S. Co., The.

**DOORS, CELLAR.**  
Buechele & Davis. (Iron.)  
Hanny, Charles G. & Co. (Iron.)  
Homestead Iron Works Co. (Iron.)  
Pittsburgh Iron Works Co. (Iron.)  
Pittsburgh Structural Steel Co. (Iron.)  
Reiling Mfg. Co.  
Rieseck, P. (Metal.)  
Vilsack, Martin Co. (Steel.)  
Watt Mfg. Co. (Ornamental Iron.)  
Womersleys Ornamental Iron & Wire Co. (Iron.)

**DOORS, CHINA CLOSET.**  
Commercial Sash & Door Co.

**DOORS, COLD STORAGE.**  
Gloekler, Bernard & Co.

**DOORS, COPPER.**  
Keystone Bronze Co.

**DOORS, CUPBOARD.**  
Commercial Sash & Door Co.

**DOORS, ELEVATOR.**  
Marshall Bros.  
Reiling Mfg. Co.

**DOORS, FIRE.**  
Keystone Fire Door Co.  
Standard Sheet Metal Mfg. Co.  
(Metallic and tin clad.)

**DOORS, FURNACE.**  
Etna Foundry Co.  
Grove, John W. (Iron, open hearth.)

**DOORS, FRONT.**  
Commercial Sash & Door Co.

**DOORS, HARDWOOD.**  
Diebold Lumber Co.  
Eiler Lumber & Mill Co.  
Edgecomb, W. H. & Son.  
Pittsburgh Hardwood Door Co.  
Wilkinsburg Stair Co.

**DOORS, IRON, ALL KINDS.**  
Keystone Ornamental Iron Co.

**DOOR, FRAMES FOR OPEN HEARTH FURNACES.**  
Keystone Bronze Co.

**DOORS, SAFE.**  
Barnes Safe & Lock Co.  
United States Safe & Lock Co.

**DOORS, SIDEWALK.**  
Sommerville Iron & Bronze Co.

**DOORS, STEEL.**  
Scaife, William B. & Sons Co.

**DOORS, STORE.**  
Commercial Sash & Door Co.

**DOORS, OVEN, COKE.**  
Charleroi Foundry & Machine Co.

**DOORS, VAULT.**  
Barnes Safe & Lock Co.  
United States Safe Co.

**DOORS, WOOD.**  
Diebold Lumber Co. (High grade.)  
Edgecomb, W. H. & Sons.  
Eiler Lumber & Mill Co. (Hard and pine.)  
May Lumber Co.  
Wilkinsburg Stair Co.

**DOUBLETTREES, TRUCK.**  
Diamond Forging Co.

**DOUBLETTREES, WAGON.**  
Diamond Forging Co.  
Kress, George R. Co. (Patent equalizing.)

**DOWELS.**  
Commercial Sash & Door Co. (Wood.)  
Lanz, M. & Son.

**DRAINS, CELLAR.**  
Standard Sanitary Mfg. Co.

**DRAINS, FLOOR.**  
Standard Sanitary Mfg. Co.

**DRAINS, STABLE.**  
Standard Sanitary Mfg. Co.

**DRAWERS, COUNTRY FLANNEL.**  
Patent Garment & Mfg. Co.

**DRESSING, AUTOMOBILE CLUTCH.**  
Eagle Lubricating Oil Co.

**DRESSING, SURGICAL ANTISEPTIC.**  
Feick Bros. Co.

**DRILLS, BLAST HOLE.**  
Keystone Driller Co.

**DRILLS, BREAST TOOL.**  
Gem Mfg. Co.

**DRILLS, BRICK.**  
Hubbard & Co.

**DRILLS, CEMENT.**  
Hubbard & Co.

**DRILLS, COAL.**  
Hardsoeg, Martin Co.  
Iron City Tool Works.  
Hubbard & Co.  
Klein-Logan Co.

**DRILLS, CORE.**  
Keystone Driller Co.

**DRILLS, ELECTRICIANS'.**  
Hubbard & Co.

**DRILLS, ELECTRIC, HAND.**  
Gem Mfg. Co.

**DRILLS, ELECTRIC ROCK.**  
Keystone Driller Co.

**DRILLS, HAMMER.**  
Hubbard & Co. ("Pieree.")

**DRILLS, HAND ELECTRIC.**  
Gem Mfg. Co.

**DRILLS, PNEUMATIC.**  
Westinghouse Electric & Mfg. Co.

**DRILLS, PORTABLE.**  
Gem Mfg. Co.

**DRILLS, PROSPECTING.**  
Keystone Driller Co.

**DRILLS, RAILROAD.**  
Keystone Driller Co.

**DRILLS, ROCK.**  
Hardsoeg, Martin Co.  
Keystone Driller Co.  
Westinghouse Electric & Mfg. Co.  
(Pneumatic.)

**DRILLS, STAR.**  
Buechel & Davis.  
Jackson Bros.

**DRILLS, STEAM.**  
Westinghouse Electric & Mfg. Co.

**DRILLS, STONE.**  
Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.

**DRILLS, TRACTION MACHINE.**  
Keystone Driller Co.

**DRIVERS, PILE.**  
Carlin's, Thomas Sons Co.

**DRIVERS, ROPE.**  
Jones & Laughlin Steel Co.

**DRIVERS, SCREW.**  
Jackson Bros.

**DRIVES, DRILL MOTOR, PORTABLE.**  
Gem Mfg. Co.

**DRIVES, DRILL ROPE, PORTABLE.**  
Gem Mfg. Co.

**DRIVES, MILL.**  
Garrison, A. Foundry Co.

**DRIVES, ROPE.**  
Gem Mfg. Co. (Portable drill.)  
Jones & Laughlin Steel Co.

**DROPS, MEDICINAL.**  
Hollander Bros. Drug Co.

**DROPS, SEWER.**  
Etna Foundry Co.  
Velte Foundry & Machine Co.

**DRUMS, GAS.**  
Riter-Conley Mfg. Co.

**DRUMS, GLYCERINE.**  
Scaife, William B. & Sons Co.

**DRUMS, GRAVITY INCLINE.**  
Carlin's, Thomas Sons Co.

**DRUMS, INCLINE.**  
Carlin's, Thomas Sons Co.  
Phillips Mine & Mill Supply Co.

**DRUMS, MUD.**  
National Tube Co.

**DRUMS, OIL.**  
Scaife, William B. & Sons Co.

**DRUMS, STEAM.**  
National Tube Co.

**DRUMS, STEEL.**  
National Tube Co.  
Scaife, William B. & Sons Co.

**DRUMS, WINDING.**  
Union Foundry & Machine Co.

**DRYERS.**  
Atlas Paint Co.  
Sipe, James B. & Co.

**DRYERS, JAPAN.**  
Brazilian Turpentine Co.  
Suydam, M. B. Co.

**DRYERS, LIQUID.**  
Globe Varnish Co.

**DRYERS, PAINT.**  
Eagle Paint & Varnish Co.

**DRYERS, ROTATING.**  
Sterrett, Thomas Foundry Co.

**DRYERS, SAND.**  
Velte Foundry & Machine Co.

**DUCKS, WATERPROOF COTTON.**  
Pittsburgh Awning Co.

**DUMBWAITERS.**  
Marshall Bros.

**DUMBWAITERS, BRASS AND BRONZE.**  
McKenna Bros. Brass Co. (Hand and electric.)

**DUMPS, CAR.**  
Phillips Mine and Mill Supply Co.

**DUSTERS, ALL KINDS.**  
Pittsburgh Brush Co.

**DYNAMOS OF EVERY DESCRIPTION.**  
Westinghouse Electric & Mfg. Co.

**EASELS, BRASS AND BRONZE.**  
McKenna Bros. Brass Co.

**EDGERS, LAWN GRASS.**  
Pittsburgh Shovel Co.

**EDGERS, TURF.**  
Pittsburgh Shovel Co.

**EJECTORS, "COLL'S" PATENT.**  
Tranter Mfg. Co.

**EJECTORS, STEAM, WATER; JET PUMPS OR SIPHON.**  
Chaplin-Fulton Mfg. Co.

**ELBOWS, AMMONIA.**  
Kelly & Jones Mfg. Co.

**ELBOWS, BASE.**  
Kelly & Jones Mfg. Co.

**ELBOWS, BLACK.**  
Central Tube Co.

**ELBOWS, BRASS.**  
Hussey, C. G. & Co.  
Kelly & Jones Mfg. Co., The.  
Pittsburgh Valve Foundry & Construction Co.

**ELBOWS, CONDUIT, ENAMELED.**  
Enamelled Metals Co.

**ELBOWS, CONDUIT, GALVANIZED.**  
Enamelled Metals Co.

**ELBOWS, DRAINAGE.**  
Kelly & Jones Mfg. Co., The.

**ELBOWS, COPPER.**  
Hussey, C. G. & Co.

**ELBOWS, FLANGED.**  
Pittsburgh Valve Foundry & Construction Co.

**ELBOWS, ENAMELED CONDUIT.**  
Enamelled Metals Co.

**ELBOWS, FURNACE PIPE, PIECED AND CORRUGATED.**  
Budke Stamping Co.

**ELBOWS, IRON, CAST.**

Kelly & Jones Mfg. Co., The.  
Pittsburgh Valve Foundry & Construction Co.

**ELBOWS, PIPE, FURNACE.**

Budke Stamping Co. (Pieced or corrugated.)

**ELBOWS, PIPE, STOVE.**

Budke Stamping Co. (Pieced or corrugated.)  
Pittsburgh Iron Folding Bed Co.

**ELBOWS, PIPE.**

Central Tube Co. (Black, red or white.)

**ELBOWS, REDUCING.**

National Tube Co.

**ELBOWS, SEMI-STEEL.**

Kelly & Jones Mfg. Co., The.

**ELBOWS, RUBBER.**

Pennsylvania Rubber Co.

**ELBOWS, SCREWED.**

Kelly & Jones Mfg. Co., The.

**ELBOWS, STEAM.**

Kelly & Jones Mfg. Co., The.  
National Tube Co.  
Pittsburgh Valve Foundry & Construction Co.

**ELBOWS, STREET.**

National Tube Co.

**ELBOWS, UNION.**

Kelly & Jones Mfg. Co., The.  
National Tube Co.

**ELECTROPLATING.**

Wolverine Supply & Mfg. Co.

**ELEVATORS, AUTOMOBILE.**

Marshall Bros.

**ELEVATORS, BELT POWER.**

Marshall Bros.

**ELEVATORS, BRASS, HAND AND ELECTRIC.**

McKenna Bros. Brass Co.

**ELEVATORS, BRONZE, HAND AND ELECTRIC.**

McKenna Bros. Brass Co.

**ELEVATORS, ELECTRIC.**

Marshall Bros.  
McKenna Bros. Brass Co. (Brass or bronze.)

Stoner, Thaw & Co.

**ELEVATORS, FREIGHT.**

Marshall Bros.  
Stoner, Thaw & Co. (Hand power.)

**ELEVATOR, GRAIN, STRUCTURES.**

Riter-Conley Mfg. Co.

**ELEVATORS, GRAVITY DROP.**

Marshall Bros. (For abattoirs and sewer pipe works.)

**ELEVATORS, HAND.**

Marshall Bros.  
McKenna Bros. Brass Co. (Brass or bronze.)

Stoner, Thaw & Co. (Power.)

**ELEVATORS, HYDRAULIC.**

Marshall Bros.  
Stoner, Thaw & Co.

**ELEVATORS, PASSENGER.**

Marshall Bros.  
Stoner, Thaw & Co.

**ELEVATORS, PUSH BUTTON.**

Marshall Bros.

**ELEVATOR REPAIR PARTS.**

Allegheny Foundry Co.

**EMERY.**

Pittsburgh Crushed Steel Co.

**ENAMELED WARE, SANITARY.**

Standard Sanitary Mfg. Co.

**ENAMELS, ALL KINDS.**

Globe Varnish Co.

**ENAMELS, BICYCLE.**

Lawrence, W. W. & Co.

**ENAMELS, BLACK, FOR BRASS, ALUMINUM, STEEL AND BRONZE.**

Banker Wind Shield Co.

**ENAMELS, CARRIAGE.**

Painter, Joel T. Co.

**ENAMELS, CAST IRON.**

Vitro Mfg. Co.

**ENAMELS, COPPER.**

Vitro Mfg. Co.

**ENAMELS, INTERIOR.**

Painter, Joel T. Co.

**ENAMELS, JEWELERS'.**

Vitro Mfg. Co.

**ENAMELS, PAINT.**

Eagle Paint and Varnish Works.

Hommel, O. Co.

Lawrence, W. W. Co.

McKeesport Plate Co.

Nevin, T. H. Co.

**ENAMELS, SCREEN.**

Painter, Joel T. Co.

**ENAMELS, SHEET STEEL.**

Vitro Mfg. Co.

**ENCLOSURES, BANKING ROOM.**

Somerville Iron & Bronze Co.

**ENCLOSURES, ELEVATOR.**

Rieger Iron & Wire Works.

Somerville Iron & Bronze Co.

Vilsack, Martin & Co.

Watt Mfg. Co.

**ENCLOSURES, TOOL ROOM.**

Rieger Iron & Wire Works.

**ENDS, BOILER TUBE SAFETY.**

National Tube Co.

**ENDS, BOLT.**

Graham Nut Co.

Lanz, M. & Son.

Oliver Iron & Steel Co.

Pittsburgh Screw & Bolt Co.

**ENGINES, BLAST BLOWING.**

Mesta Machine Co.  
Westinghouse Machine Co.

**ENGINES, BLOWING.**

Mackintosh-Hemphill & Co.

**ENGINES, BLOWING, STEAM.**

Mackintosh-Hemphill & Co.

**ENGINES, COMMERCIAL.**

Gardner Convertible Steam & Gas  
Engine Co.

**ENGINES, CONVERTIBLE, STEAM AND  
GAS.**

Tillinghast, B. D.

**ENGINES, CORLISS.**

Westinghouse Machine Co.  
Mesta Machine Co.

**ENGINES, DENTAL.**

Pittsburgh Electric Specialties Co.

**ENGINES, DOUBLE ROTARY.**

Motsinger Rotary Engine Co.

**ENGINES, DRILLING, OIL WELL.**

National Supply Co.

**ENGINES, DRILLING, ROCK.**

Keystone Driller Co.

**ENGINES, ELECTRIC RAILROAD.**

Westinghouse Electric & Mfg. Co.

**ENGINES, GAS.**

Butler Engine & Foundry Co.  
Csabina, E. (Special.)  
Duquesne Co., The.  
Evans Mfg. Co., The.  
Gardner Convertible Steam & Gas  
Engine Co.  
Keystone Driller Co.  
Keystone Machine Co.  
Marine Mfg. & Supply Co. (For land  
and marine work.)  
Mesta Machine Co. (Rolling mills, blast  
furnaces, power plants.)  
National Gear Wheel Foundry Co.  
Oil Well Supply Co.  
Phillips, T. W. Mfg. Co.  
Pittsburgh Machine Co.  
Tillinghast, B. D.  
Westinghouse Machine Co.

**ENGINES, GASOLINE.**

Evans Mfg. Co., The.  
Keystone Driller Co.  
Marine Mfg. & Supply Co. (Land and  
marine.)  
Phillips, T. W. Mfg. Co.  
Pittsburgh Machine Co.  
Oil Well Supply Co.  
Westinghouse Machine Co.

**ENGINES, KEROSENE.**

Westinghouse Machine Co.

**ENGINES, OIL.**

Westinghouse Machine Co.

**ENGINES, OIL COUNTRY GAS.**

Gardner Convertible Gas & Steam  
Engine Co.

**ENGINES, OIL WELL DRILLING.**

National Supply Co.

**ENGINES, PORTABLE.**

Duquesne Co., The. (Gas or steam.)  
Westinghouse Machine Co. (Steam.)

**ENGINES, RAILROAD, ELECTRIC.**

Westinghouse Electric & Mfg. Co.

**ENGINES, REPAIRS FOR.**

Combination Engine Co.

**ENGINES, REVERSING, PISTON VALVE.**

Mesta Machine Co.

**ENGINES, ROCK DRILLING.**

Keystone Driller Co.

**ENGINES, STATIONARY.**

Duquesne Co., The.

**ENGINES, STEAM.**

Butler Engine & Foundry Co.  
Csabina, E. (Special.)  
Duquesne Co., The. (Portable and  
stationary.)  
Evans Mfg. Co., The.  
Herron-Webb Engineering Co.  
Mackintosh-Hemphill & Co. (Blowing.)  
Marine Mfg. & Supply Co. (Land and  
marine.)  
Mesta Machine Co. (For mills.)  
National Supply Co.  
Oil Well Supply Co.  
Reese, James & Son.  
Tillinghast, B. D. (Convertible.)  
Westinghouse Machine Co. (High  
speed.)  
Wilson-Snyder Mdfg. Co.

**ENGINES, STEAM HAULAGE.**

Herron-Webb Engineering Co.

**ENGINES, STEAM HOISTING.**

Carlin's, Thomas Sons Co.  
Milholland, J. & J. B.

**ENGINES, STEAM PUMP, DEEP WELL.**

Wilson-Snyder Mfg. Co.,

**ENGINES, TRACTION.**

Duquesne Co., The.

**ENGRAVINGS FROM STEEL PLATE SE-  
CURITIES, viz.: Bonds, Stocks, Interim  
Certificates, Collateral Trust Notes, Cur-  
rency and Stamps.**

Republic Bank Note Co.

**ENGRAVINGS.**

American Steel Plate Engraving Co.  
(Steel Plate.)  
Art Engraving & Printing Co.

**EQUIPMENT, HOTEL KITCHEN.**

Gloekler, Bernard Co.

**EQUIPMENT, PIPE, COMPLETE FROM  
PLANS.**

American Foundry & Construction Co.

**EQUIPMENT, ROLLING MILL.**

Fawcett Machine Co.  
Mackintosh-Hemphill & Co.

**EQUIPMENT, SCREENING.**

Phillips Mine & Mill Supply Co.

**EQUIPMENT, STEAM POWER.**

Pittsburgh Gage & Supply Co.

**EQUIPMENT, STEEL WORKS.**  
Fawcett Machine Co.

**EQUIPMENT, TUBE WORKS.**  
Taylor-Wilson Mfg. Co.

**ESCAPES, FIRE, IRON,**  
Albree, Chester B. Iron Works.  
Buechele & Davis.  
Colditz & McMinn.  
Homestead Iron Works (Ornamental.)  
Keystone Ornamental Iron Works.  
Kratzer, W. N. & Co.  
Pittsburgh Iron Works Co.  
Pittsburgh Structural Steel Co.  
Reiling Mfg. Co.  
Reiseck, P.  
Star Ornamental Iron & Wire Works.  
Taylor & Dean.  
Vilsack, Martin Co.

**ESCAPES, PORTABLE, FOR TRAVELERS  
AND BUILDINGDS.**  
Weaver Specialty Co.

**EVENERS, WAGON AND TRUCK.**  
Diamond Forging & Mfg. Co.

**EXHAUSTERS, ELECTRIC.**  
Westinghouse Electric & Mfg. Co.

**EXPANDERS, BOILER FLUE.**  
Ajax Mfg. Co.

**EXPANDERS, COUPLING.**  
United Engineering & Foundry Co.

**EXPANDERS, TUBE.**  
Ajax Mfg. Co.

**EXTERMINATORS, INSECT.**  
Pittsburgh Insect Exterminating Co.

**EXTINGUISHERS, FIRE.**  
Fire Extinguisher & Supply Co.  
McKenna Bros. Brass Co.

**EXTRACTS, FRUIT.**  
McCoy Mfg. Co.

**EXTRACTORS, GREASE, SINGLE AND  
TWIN.**  
Elliott Co.

**EXTRACTORS, INGOT.**  
Taylor-Wilson Mfg. Co.

**EXTRACTORS, MANDREL.**  
Union Foundry & Machine Co.  
United Engineering & Foundry Co.

**EXTRACTS, FLAVORING.**  
Tweed & Botsford.

**EYES, BLEACHERY, RUBBER.**  
Pennsylvania Rubber Co.

**EYES, DROP FORGED, FOR TRACES AND  
BRACE.**  
Diamond Forging & Mfg. Co.

**EYES, DRAWN FOR PICKS OF ALL KINDS.**  
Iron City Tool Works.  
Klein-Logan Co.

**FABRIC, FOLDED WIRE FOR CONCRETE  
REINFORCEMENT.**  
Electric Welding Co.

**FACINGS, FOUNDRY.**  
McCormick, J. S. Co.  
Obermayer, S. Co., The. (Sea coal.)

**FANS, ELECTRIC EXHAUST.**  
Westinghouse Electric & Mfg. Co.

**FANS, VENTILATING.**  
Clifford Fan Works. (Mine.)  
Herron-Webb Engineering Co. (Mine.)  
Westinghouse Electric & Mfg. Co.

**FASTENERS, BELT.**  
Wall, P. Mfg. Co.

**FASTENERS, BOLT.**  
American Nut & Bolt Fastener Co.

**FASTENERS, DOOR, REFRIGERATOR.**  
Gloekler, Bernard Co.

**FASTENERS, NUT.**  
American Nut & Bolt Fastener Co.

**FAUCETS, BEER BOTTLING.**  
McKenna Bros. Brass Co.

**FEEDERS, ALUMINUM RAILWAY.**  
Aluminum Co. of America.

**FEEDERS, AUTOMATIC WATER.**  
Kelly & Jones Mfg. Co., The.

**FEEDERS, WATER BOILER.**  
Chaplan-Fulton Mfg. Co.

**FEEDS, BRAN, CORN MEAL, CHOPPED,  
MIDDINGLS.**  
Walter, George & Son.

**FELT SPECIALTIES.**  
Guyasuta Mfg. Co.

**FELTS, HAIR.**  
Diamond Felt & Mfg. Co.

**FELTS, ROOFING.**  
McClintock & Ivine.

**FENCES, EXPANDED METAL.**  
McDowell Mfg. Co.

**FENCES, IRON.**  
Albree, Chester B. Iron Works.  
Buechele & Davis.  
Colditz & McMinn.  
Hanny, Charles G. & Co.  
Page Woven Wire Fence Co.  
Pittsburgh Iron Works Co.  
Reiling Mfg. Co.  
Taylor & Dean.  
Tyler, W. S. Co., The.  
Vilsack, Martin Co.  
Womersleys Ornamental Iron & Wire  
Works.

**FENCES, LAWN, IRON AND WIRE.**  
Page Woven Wire Fence Co.

**FENCES, PICKET, WIRE.**  
Glen Mfg. Co.

**FENCES, WIRE.**  
Glen Mfg. Co.  
Taylor & Dean.  
Womersleys Ornamental Iron and Wire  
Works.

**FENCES, WIRE FOR.**

American Steel & Wire Co.  
Page Woven Wire Fence Co.  
Pittsburgh Steel Co. (Woven.)

**FENDERS, ALUMINUM.**

United States Aluminum Co.  
Aluminum Co. of America.

**FENDERS, CORK.**

Armstrong Cork Co.

**FENDERS, STOVE, FIRE PLACE.**

Superior Mfg. Co. (Brass, bronze or  
black.)

**FERRO, VANADIUM.**

American Vanadium Co.

**FERRULES, BOILER TUBE.**

Hussey, C. G. Co. (Copper.)

**FERRULES, BRASS. (PLAIN AND REDU-**

CING.)

Standard Sanitary Mfg. Co.

**FERRULES, COPPER.**

Hussey, C. G. Co.

**FERRULES, TAP SCREW.**

Kelly & Jones Mfg. Co., The.

**FERTILIZER, BONE.**

American Reduction Co.  
Pittsburgh Provision & Packing Co.

**FERTILIZER, GUANO.**

Pittsburgh Provision & Packing Co.

**FERTILIZER, PHOSPHATE.**

American Reduction Co.  
Pittsburgh Provision & Packing Co.

**FERTILIZER, POTASH.**

American Reduction Co.

**FIBRE, ELECTRIC.**

Union Electric Co.

**FIGURES, WAX.**

Becker & Kiesewetter.

**FILES, BILL & LETTER.**

Standard Wire Co.

**FILLERS, BATH TUB.**

Nevin, T. H. Co.

**FILLERS, CASTING.**

Nevin, T. H. Co.

**FILLERS, COPPER AND NICKEL PLATED**

**OILER.**

Gem Mfg. Co.

**FILLERS, IRON.**

Atlas Paint Co.  
Nevin, T. H. Co.

Suydam, M. B. Co.

**FILLERS, FRUIT JAR, ENAMELED.**

Dunlap, John Co.

**FILLERS, HYDRAULIC.**

Pittsburgh Valve Foundry & Construc-  
tion Co.

**FILLERS, OILER, HEAVY BRAZED STEEL**

**PYRAMID.**

Gem Mfg. Co.  
Sands Mfg. Co.  
Wall, P. Mfg. Co.

**FILLERS, PITCH, COAL TAR.**

Barrett Mfg. Co.

**FILLERS, STEEL.**

Atlas Paint Co.  
Nevin, T. H. Co.  
Suydam, M. B. Co.

**FILLERS, WOOD.**

Eagle Paint & Varnish Co.  
Globe Varnish Co.  
Suydam, M. B. Co.  
Wheeler, Henry & Son.

**FILTERS, CHARCOAL.**

Pittsburgh Filter Mfg. Co. (Water,  
drinking.)  
Scaife, William B. & Sons Co.

**FILTERS, ELECTRIC OZONE.**

McDowell Mfg. Co.

**FILTERS, OIL.**

Elliott Co.  
Pittsburgh Gage & Supply Co. ("White  
Star.")  
Scaife, William B. & Sons Co.

**FILTERS, TRIPOLI.**

Scaife, William B. & Sons Co.

**FILTERS, WATER, DRINKING.**

Cummings Filter Co. (Public build-  
ings and residences.)  
Elliott Co.  
Pittsburgh Filter Mfg. Co.

**FIRE PROOFING, POROUS, TERRA**

COTTA.

National Fire Proofing Co.

**FIRE WORKS, SPARKLERS.**

American Sparkler Co.

**FITTINGS, AIR BRAKE.**

National Tube Co.  
Pittsburgh Malleable Iron Co.  
Westinghouse Air Brake Co.

**FITTINGS, AMMONIA.**

Kelly & Jones Co., The.

**FITTINGS, BATH ROOM.**

Standard Sanitary Mfg. Co.

**FITTINGS, BOILER.**

National Tube Co.

**FITTINGS, BRASS.**

Kelly & Jones Mfg. Co., The.  
National Tube Co.

**FITTINGS, BRONZE.**

Pittsburgh Valve Foundry & Construc-  
tion Co.

**FITTINGS, B. & S. SPECIAL.**

Sterrett, Thomas Foundry Co.

**FITTINGS, CONDUIT.**

Central Tube Co.

**FITTINGS, DERRICK.**  
Carlin's, Thomas Sons Co.

**FITTINGS, DRAINAGE.**  
Kelly & Jones Co., The.  
National Tube Co.

**FITTINGS, FIRE DOOR.**  
Keystone Fire Door Co.

**FITTINGS, LAVATORY.**  
Standard Sanitary Mfg. Co.

**FITTINGS, MACHINE, DRILLING AND PUMP.**  
Keystone Driller Co.

**FITTINGS, METAL, ACID.**  
Pittsburgh Valve Foundry & Construction Co.

**FITTINGS, PIPE.**  
Acheson Mfg. Co. (Brass.)  
American Foundry & Construction Co.  
(Soil.)  
American Foundry & Pipe Co. (Soil.)  
Best Mfg. Co. (Soil and steam.)  
Kelly & Jones Co., The. (Mall. & cast steam.)  
National Tube Co. (Cast and malleable.)  
Oil Well Supply Co. (Mall. and cast.)  
Pittsburgh Gage & Supply Co. (Cast Iron flanged.)  
Pittsburgh Pipe & Equipment Co.  
(Flanged iron.)  
Pittsburgh Valve Foundry & Construction Co. (Steam and water.)  
Taylor-Wilson Mfg. Co. (Flanged.)  
Union Sewer Pipe Co. (Sewer.)  
Standard Sanitary Mfg. Co. (Brass.)

**FITTINGS, RAILING.**  
Kelly & Jones Co., The.  
McKenna Bros. Brass Co. (Brass or bronze.)  
National Tube Co.

**FITTINGS, SCREWED.**  
National Tube Co.

**FITTINGS, SEMI-STEEL.**  
Kelly & Jones Mfg. Co., The.

**FITTINGS, SLOP SINK.**  
Standard Sanitary Mfg. Co.

**FITTINGS, STABLE, IRON.**  
Colditz & McMinn.

**FITTINGS, STEAM.**  
Kelly & Jones Mfg. Co., The.  
Pittsburgh Gage & Supply Co.  
Pittsburgh Valve Foundry & Construction Co.

**FITTINGS, URINAL STALL.**  
Standard Sanitary Mfg. Co.

**FITTINGS, WAGON, DROP FORGED STEEL.**  
Diamond Forging & Mfg. Co.

**FITTINGS, WIRE ROPE.**  
Carlin's, Thomas Sons Co.

**FIXTURES, ASTRONOMICAL.**  
Brashear, John A. Co.

**FIXTURES, ASTROPHYSICAL.**  
Brashear, John A. Co.

**FIXTURES, BANK.**  
Kates & Co.  
McLean, W. B. Mfg. Co.

**FIXTURES, BUTCHERS'.**  
Glockler, Bernard Co.

**FIXTURES, DERRICK.**  
Carlin's, Thomas Sons Co.

**FIXTURES, DISPLAY.**  
McKenna Bros. Brass Co.

**FIXTURES, ELECTRIC, GAS AND OIL ILLUMINATION.**  
Pittsburgh Lamp, Brass & Glass Co.

**FIXTURES, ELECTRIC LAMP.**  
Nernst Lamp Co.

**FIXTURES, ELECTRIC LIGHT, BRASS AND BRONZE.**  
Architectural Bronze Co.

**FIXTURES, GAS LIGHT.**  
Frederick-Elder Co., The.

**FIXTURES, GLASS HOUSE.**  
Willets Co., The.

**FIXTURES, GROCERS.**  
Glockler, Bernard Co.

**FIXTURES, INCANDESCENT LIGHT.**  
Frederick-Elder Co., The.

**FIXTURES, LIGHTNING CONDUCTORS.**  
Kress, George R. Co.

**FIXTURES, OFFICE.**  
Kates & Co.  
McLean, W. B. Mfg. Co.

**FIXTURES, OPTICAL.**  
Brashear, John A. Co.

**FIXTURES, STABLE, IRON.**  
Hanny, Charles G. Co.  
Womersleys Ornamental Iron & Wire Co.

**FIXTURES, STORE, ALL KINDS.**  
Kates & Co.  
McLean, W. B. Mfg. Co.

**FIXTURES, WIRELESS TELEGRAPH.**  
Edgcomb-Pyle Wireless Co.

**FLAGS.**  
Dreesen, William.  
Mamaux Awning & Tent Co.

**FLANGES, AUTOMOBILE WHEEL HUB.**  
National Tube Co.

**FLANGES, CEILING.**  
National Tube Co.

**FLANGES, COMPANION.**  
National Tube Co.

**FLANGES, FLOOR.**  
National Tube Co.

**FLANGES, MANHOLE.**  
Munroe, R. & Son.

**FLANGES, PIPE.**

American Foundry & Construction Co.  
(Brass, semi-steel, cast and steel.)  
Best Mfg. Co. (Iron and steel.)  
Kelly & Jones Co. (Brass, cast iron,  
malleable, semi-steel.)  
National Tube Co. (Brass, cast, malleable.)  
Pittsburgh Piping & Equipment Co.  
Pittsburgh Valve Foundry & Construction Co.

**FLANGES, STEEL, PRESSED AND WELDED.**

Riter-Conley Mfg. Co.

**FLANGES, UNION.**

Pittsburgh Valve Foundry & Construction Co.

**FLASKS, COFFEE, ENAMELED.**

Dunlap, John Co.

**FLASKS, GLASS.**

Crescent Bottle Co.  
Fidelity Glass Co.  
Hamilton, J. T. & A.  
Jeannette Glass Co.  
Tibby Bros. Glass Co.

**FLASKS, MINERS' TIN.**

Grier Bros. Ltd.

**FLOATS, CORK, CARBURETOR.**

Armstrong Cork Co.

**FLOORING, HARD WOOD.**

Colonial Floor Co. (All kinds.)

**FLOORING, OAK.**

Bruckman Lumber Co.  
Commercial Sash & Door Co.

**FLOORING, WOOD.**

Edgecomb, W. H. & Son.  
Pittsburgh Hardwood Door Co.

**FLOORS, TILE, ENCAUSTIC, CERAMIC AND VITREOUS.**

Star Encaustic Tile Co.

**FLOUR, BUCKWHEAT.**

Klingler, H. J. & Co.  
Walter George & Son.

**FLOUR, GRAHAM.**

Walter, George & Son.

**FLOUR, SPRING,**

Klingler, H. J. & Co.

**FLOUR, WHEAT.**

Campbell, Joseph.  
Klingler, H. J. & Co. (Whole.)  
Walter, George & Son.

**FLOUR, WINTER.**

Klingler, H. J. & Co.

**FLUES, BOILER.**

National Tube Co.  
Tyler Tube & Pipe Co.

**FLUES, CHIMNEY SMOKE.**

Riter-Conley Mfg. Co.

**FLUIDS, EMBALMING.**

Pittsburgh Fluid Co.

**FLUMES, IRON AND STEEL.**

Scaife, William B. & Sons Co.

**FLUSHERS, SEWER.**

Standard Sanitary Mfg. Co.

**FLUXES, FOUNDRY, BRASS AND IRON.**

Basic Mineral Co., The.

**FOOD PRODUCTS.**

Heinz, H. J. Co.  
Lutz & Schramm.

**FORGES, BLACKSMITH.**

Monesssen Foundry & Machine Co.  
(Large.)

Tate-Jones & Co. (Portable.)

**FORGES, OIL.**

Tate-Jones & Co.

**FORGINGS, AUTOMOBILES.**

Crescent Forging Co.  
Heppenstall Forge & Knife Co.  
Standard Gauge Steel Co.  
Thompson, E. J. Co.

**FORGINGS, AXLE.**

Carbon Steel Co. (Car.)  
Western Tool & Forge Co.

**FORGINGS, BOLT.**

Pittsburgh Rivet Co.  
Pittsburgh Screw & Bolt Co.

**FORGINGS, CAR.**

Valley Forging Co.  
Western Tool & Forge Co.

**FORGINGS, CHAIN.**

Carter Iron Co.  
Monongahela Iron & Steel Co.

**FORGINGS, DROP.**

Crescent Forging Co.  
Diamond Forging Co.  
Heppenstall Forge & Knife Co.  
McKay, James Co.  
Oliver Iron & Steel Co.  
Pennsylvania Drop Forging Co.  
Valley Forging Co.  
Western Tool & Forge Co.

**FORGINGS, ENGINE, GAS.**

Heppenstall Forge & Knife Co.

**FORGINGS, FURNACE.**

Dixon, Charles E. & Sons.

**FORGINGS, GENERAL.**

Etna Forge & Bolt Co.  
Fort Pitt Forge Co.  
Gracey, R. & Sons Co.  
Oliver Iron & Steel Co.  
Pittsburgh Block & Mfg. Co.  
Pittsburgh Trolley & Forge Co.

**FORGINGS, HOOK.**

Nicholson & Co.

**FORGINGS, IRON.**

Heppenstall Forge & Knife Co.  
Lanz, M. & Son.  
Albree, Chester B. Iron Works.  
Jones & Laughlin Steel Co.  
Republic Iron & Steel Co.

**FORGINGS, IRON CAR.**

Carnegie Steel Co.

**FORGINGS, IRON, HEAVY.**  
Kesselman & Co.

**FORGINGS, IRON, LIGHT.**  
Standard Chain Co. (For railroads.)

**FORGINGS, IRON ORNAMENTAL.**  
Womersleys Ornamental Iron & Wire Works.

**FORGINGS, IRON, WROUGHT.**  
Pittsburgh Steel Mfg. Co.

**FORGINGS, LOCOMOTIVE.**  
Pittsburgh Forge & Iron Co.

**FORGINGS, MACHINE.**  
Braeburn Steel Co.  
Carnegie Steel Co.  
Heppenstall Forge & Knife Co.  
Pittsburgh Forge & Iron Co.

**FORGINGS, MARINE.**  
Braeburn Steel Co.  
Heppenstall Forge & Knife Co.  
Pittsburgh Forge & Iron Co.

**FORGINGS, MINE.**  
Crescent Forgings Co.  
McKay, James & Co.

**FORGINGS, RAILROAD.**  
Braeburn Steel Co.  
Heppenstall Forge & Knife Co.  
Standard Chain Co. (Light iron and steel.)

**FORGINGS, RING.**  
Nicholson & Co.

**FORGINGS, RIVET.**  
Pittsburgh Rivet Co.  
Pittsburgh Screw & Bolt Co.

**FORGINGS, SHACKLE.**  
Nicholson & Co.

**FORGINGS, SHAFT.**  
Braeburn Steel Co.  
Columbia Steel & Shafting Co.

**FORGINGS, SMALL.**  
Velte Foundry & Machine Co.

**FORGINGS, SPECIAL.**  
Valley Forgings Co.

**FORGINGS, STEEL.**  
Braeburn Steel Co.  
Carnegie Steel Co.  
Heppenstall Forge & Knife Co.  
Jones & Laughlin Steel Co.  
Pittsburgh Rivet Co.  
Pittsburgh Screw & Bolt Co.  
Republic Iron & Steel Co.  
Vulcan Crucible Steel Co.

**FORGINGS, STEEL, ACID.**  
Carbon Steel Co.

**FORGINGS, STEEL, NICKEL.**  
Carbon Steel Co.  
Carnegie Steel Co.  
Crescent Forgings Co.

**FORGINGS, STEEL, OPEN HEARTH.**  
Colonial Steel Co.

**FORGINGS, STEEL, ROUGH, CRUCIBLE.**  
Colonial Steel Co.

**FORGINGS, STEEL, SPECIAL.**  
Fawcett Machine Co.  
Valley Forging Co.

**FORGINGS, STEEL, TOOL.**  
Firth-Sterling Steel Co.

**FORGINGS, STEEL, VANADIUM.**  
American Vanadium Co.

**FORKS, DROP FORGED BRAKE ROD.**  
Diamond Forging & Mfg. Co.

**FORKS, HAY TEDDER.**  
American Spiral Spring & Mfg. Co.

**FORKS, RAIL.**  
Hubbard & Co.  
Iron City Tool Works. (Railroad.)  
Klein-Logan Co.  
Oliver Iron & Steel Co. (Railroad.)  
Verona Tool Works. (Railroad.)  
Western Tool & Forge Co.

**FOUNDERS.**  
Cochecton Iron Co.  
Early, W. J. & Son.  
Fitzpatrick, J. G. Mfg. Co. (Brass.)

**FOUNTAINS, COPPER.**  
Stender Coppersmith Co., The

**FOUNTAINS, DRINKING, BUBBLING CUP.**  
Standard Sanitary Mfg. Co.

**FOUNTAINS, DRINKING, ENAMELED.**  
United States Sanitary Mfg. Co.

**FOUNTAINS, DRINKING, FAUCET.**  
Standard Sanitary Mfg. Co.

**FOUNTAINS, DRINKING, IRON.**  
Taylor & Dean.

**FOUNTAINS, DRINKING, PORCELAIN.**  
Standard Sanitary Mfg. Co.  
United States Sanitary Mfg. Co.

**FOUNTS, LAMP.**  
Co-operative Flint Glass Co.  
Phoenix Glass Co. (Glass.)

**FRAMES, AWNING.**  
Turner, C. A., Inc.

**FRAMES, COKE OVEN.**  
Charleroi Foundry & Machine Co.

**FRAMES, DOOR, WOOD.**  
Commercial Sash & Door Co.  
Edgecomb, W. H. & Sons.  
Pittsburgh Hardwood Door Co.

**FRAMES, FIRE PLACE.**  
Knott-Harker & Co.

**FRAMES, GRATE.**  
Superior Mfg. Co., The. ("Superior.")

**FRAMES, HEAD, MINING.**  
Riter-Conley Mfg. Co.

**FRAMES, LOCOMOTIVE, CAST STEEL.**  
Union Steel Casting Co.

**FRAMES, MANTLE MIRROR, ARCHITECTURAL WOOD.**  
Morris, Graf & Co.

**FRAMES, PICTURE.**  
Gillespie, J. J. & Co.  
Ruffenach, Edward, Jr.

**FRAMES, POSTER, BRASS OR BRONZE.**  
McKenna Bros. Brass Co.

**FRAMES, STOP COCK.**  
Carlin's, Thomas Sons Co.

**FRAMES, WINDOW.**  
Commercial Sash & Door Co. (Wood.)  
Edgecomb, W. H. & Sons. (Wood.)  
Feath & Kerr. (Wood.)  
Keighley, S. Metal Ceiling & Mfg. Co.  
(Sheet metal.)  
Pittsburgh Hardwood Door Co. (Wood.)

**FREEZERS, ICE CREAM.**  
Stender Coppersmith Co., The.

**FROES, COOPERS'.**  
Klein-Logan Co.

**FROGS.**  
Black Diamond Engineering Co.  
Coshocton Iron Co.  
Irwin Foundry & Mine Car Co. (Cast iron.)  
Orenstein, Arthur Koppel Co. (Rail-road.)

**FRONTS, BOILER.**  
Munroe, R. & Sons.

**FRONTS, COUNTER, OPALITE GLASS.**  
Opalite Tile Co. (For banks and stores.)

**FRONTS, FALSE, FOR FIRE PLACES.**  
Penn Burner & Plating Co.

**FRONTS, STORE, ORNAMENTAL IRON.**  
Tyler, W. S. Co., The.

**FRONTS, STORE, WOOD.**  
Commercial Sash & Door Co.  
Diebold Lumber Co.  
May Lumber Co.

**FRUIT PRODUCTS.**  
Heinz, H. J. Co.  
Lutz & Schramm Co.

**FUEL, ARTIFICIAL, FOR NATURAL OR ARTIFICIAL GAS.**  
Superior Mfg. Co. (Stoves or grates.)

**FULLERS, TOP AND BOTTOM.**  
Klein-Logan Co.

**FUNNELS, ENAMELED.**  
Dunlap, John Co.

**FUNNELS, TEEMING.**  
McCullough-Dalzell Crucible Co.

**FURNACES, ANNEALING.**  
Naismith, George & Son.  
Tate-Jones & Co.  
Vitro Mfg. Co.

**FURNACES, BLAST.**  
Carroll-Porter Boiler & Tank Co.  
McNeil, James & Bro.  
Naismith, George & Son.  
Rheam, S. B.  
Riter-Conley Mfg. Co.  
Scaife, William B. & Sons. Co.

**FURNACES, BRAZING.**  
Vitro Mfg. Co.

**FURNACES, CASE HARDENING.**  
Vitro Mfg. Co.

**FURNACES, CRUCIBLE.**  
Naismith, George & Son.  
Vitro Mfg. Co.

**FURNACES, ELECTRIC LABORATORY.**  
Stupakoff, S. H.

**FURNACES, ELECTRIC, FOR ALL PURPOSES.**  
Pittsburgh Electric Furnace Co.

**FURNACES, ENAMELING.**  
Vitro Mfg. Co.

**FURNACES, FORGING.**  
Tate-Jones & Co.  
Vitro Mfg. Co.

**FURNACES, GAS.**  
Naismith, George & Son.  
Vitro Mfg. Co.

**FURNACES, GLASS MAKERS.**  
Dixon, H. L. Co.  
Vitro Mfg. Co.

**FURNACES, HEATING.**  
Diamond Hardware Mfg. Co. (Gas house.)  
Tate-Jones & Co.

**FURNACES, MALLEABLE.**  
Vitro Mfg. Co.

**FURNACES, MELTING.**  
Riter-Conley Mfg. Co.

**FURNACES, OIL.**  
Naismith, George & Son.

**FURNACES, OPEN HEARTH.**  
Naismith, George & Son.  
Riter-Conley Mfg. Co.

**FURNACES, SHEET METAL.**  
McCombs, William P. Co.

**FURNACES, SMOKELESS.**  
Westinghouse Machine Co.

**FURNACES, SOAKING PIT.**  
Naismith, George & Son.

**FURNACES, "SUPERIOR" GAS.**  
Superior Mfg. Co. (Natural, artificial.)

**FURNACES, TEMPERING.**  
Tate-Jones & Co.

**FURNACES, WARM AIR.**  
Helt, George P. (Residences.)  
Stove & Range Co. of Pgh. (Hard and soft coal.)

**FURNACES, WELDING.**  
Tate-Jones & Co.

**FURNITURE, ART.**  
Colonial Art Furniture Co.  
East End Art Furniture Co.

**FURNITURE, CHURCH.**  
Kittanning Church Seating Co.

**FURNITURE, HOSPITAL.**

Feick Bros. Co.

**FURNITURE, CHAIRS.**

Rombach, William Rose.

**FURNITURE, SPECIAL, HAND AND MANUFACTURED.**

Pittsburgh Art Furniture Shop.

**FUSES, FOR ELECTRIC LIGHT AND POWER CIRCUITS.**

Daum, A. F. Co. ("Daum.")

**FUSES, ELECTRIC.**

Union Electric Co.

Westinghouse Electric &amp; Mfg. Co.

**FUSES, SIGNAL, RAILROAD TIME.**

Versailles Railway Signal Co.

**GALVANIZING PLANTS INSTALLED.**

Pittsburgh Galvanizing Co. ("Electro.")

**GALVANIZING.**McCance Bros. Co. (All kinds.)  
Pittsburgh Electro Galvanizing Co.  
(Cold process.)**GARAGES, PORTABLE STEEL. (Fireproof.)**McClintic-Marshall Construction Co.  
Scholes Bros.  
Standard Sheet Metal Mfg. Co.**GAS, CARBONIC ACID.**

Liquid Carbonic Co.

**GAS FITTINGS. (See FITTINGS.)****GAS FIXTURES. (See FIXTURES.)****GASKETS, BRONZE.**

Pittsburgh Valve Foundry &amp; Construction Co.

**GASKETS, COPPER.**Hussey, C. G. & Co. (Corrugated.)  
Pittsburgh Valve Foundry & Construction Co.**GASKETS FOR FLANGED FITTINGS AND VALVES.**

Kelly &amp; Jones Co., The.

**GASKETS, RUBBER.**

Pennsylvania Rubber Co.

**GASKETS, TUBULAR RUBBER.**

Pennsylvania Rubber Co.

**GASOLINES.**Gulf Refining Co.  
Miller's, A. D. Sons Co.  
Petroleum Products Co.  
Pittsburgh Oil Refining Co.  
Robinson Oil Co., The.  
Waverly Oil Works Co., The.**GATES, BLAST FURNACE.**

Pittsburgh Valve Foundry &amp; Construction Co.

**GATES, BRONZE FENCE.**

Sommerville Iron &amp; Bronze Co.

**GATES, CEMETERY FENCE.**

Glen Mfg. Co.

Page Woven Wire Fence Co.

**GATES, ELEVATOR SAFETY, AUTOMATIC.**

Marshall Bros.

Taylor &amp; Dean.

**GATES, FENCE, CEMETERY.**

Glen Mfg. Co.

Page Woven Wire Fence Co.

**GATES, FENCE, ORNAMENTAL IRON.**

Glen Mfg. Co.

Page Woven Wire Fence Co.

Taylor &amp; Dean.

Sommerville Iron &amp; Bronze Co.

**GATES, FENCE, WIRE.**

Glen Mfg. Co.

Page Woven Wire Fence Co.

Somerville Iron &amp; Bronze Co.

Taylor &amp; Dean.

**GATES, FOLDING, IRON.**

Reiling Mfg. Co.

Rieger Iron &amp; Wire Works.

**GATES, FURNACE, BLAST.**

Pittsburgh Valve Foundry &amp; Construction Co.

**GATES, LOCK, STEEL, FOR RIVER IMPROVEMENTS.**

Kratzer, W. N. &amp; Co.

Pennsylvania Bridge Co.

McClintic-Marshall Construction Co.

**GATES, STEEL BRIDGE.**

Pennsylvania Bridge Co.

**GATES, STEEL, FOR WATER POWER COMPANIES.**

Kratzer, W. N. &amp; Co.

**GATES, WATER WORKS.**

Pittsburgh Valve Foundry &amp; Construction Co.

**GAUGES, AIR.**

Pittsburgh Gage &amp; Supply Co. ("Pittsburgh.")

**GAUGES, AIR BRAKE.**

Westinghouse Air Brake Co.

**GAUGES, ALTITUDE.**

Pittsburgh Gage &amp; Supply Co. ("Pittsburgh.")

**GAUGES, AMMONIA.**

Pittsburgh Gage &amp; Supply Co. ("Pittsburgh.")

**GAUGES, PEN DEPTH, INK FLOAT.**

Weaver Specialty Co.

**GAUGES, PRESSURE RECORDING.**

Pittsburgh Gage &amp; Supply Co. ("Pittsburgh.")

Pittsburgh Meter Co. (Gas.)

**GAUGES, RECORDING.**

Pittsburgh Gage &amp; Supply Co. ("Pittsburgh.")

Pittsburgh Meter Co.

**GAUGES, STEAM.**

Pittsburgh Gage &amp; Supply Co. ("Pittsburgh.")

**GAUGES, TRACK.**

Hubbard &amp; Co.

Iron City Tool Works.

Verona Tool Works.

**GAUGES, VACUUM.**

Pittsburgh Gage & Supply Co. ("Pittsburgh.")

**GAUGES, VOLUME.**

Pittsburgh Meter Co.

**GAUGES, WATER.**

Kelly & Jones Co., The.

Pittsburgh Gage & Supply Co.

Tranter Mfg. Co.

Williams Gauge Co., The. ("Success.")

**GAUGES, WATER LEVEL.**

Golden-Anderson Valve Specialty Co. (Level.)

**GAUGES, WATER PRESSURE, COMBINATION.**

Pittsburgh Gage & Supply Co. ("Pittsburgh.")

**GAUGES, WATER, SELF CLOSING.**

Pittsburgh Gage & Supply Co. ("Pittsburgh.")

**GEARS.**

Westinghouse Electric & Mfg. Co.

**GEARS, AUTOMOBILE.**

Nuttal, R. D. Co.

Vanadium Metals Co.

**GEARS, BEVEL.**

Fawcus Machine Co.

Mesta Machine Co. (Compensating.)

Nuttal, R. D. Co.

Simonds Mfg. Co.

Taylor-Wilson Mfg. Co. (Planed.)

Union Foundry & Machine Co.

**GEARS, FIBRE.**

Nuttal, R. D. Co.

**GEARS, FRICTION DRAFT.**

Westinghouse Air Brake Co.

**GEARS, IRON.**

Garrison, A. Foundry Co.

Mesta Machine Co.

National Gear Wheel Foundry Co.

Nuttal, R. D. Co.

Taylor-Wilson Mfg. Co. (Charcoal gun.)

Union Foundry & Machine Co.

**GEARS, MACHINE MOULDED.**

Mesta Machine Co.

National Gear Wheel Foundry Co.

Nuttal, R. D. Co. (Cement.)

Taylor-Wilson Mfg. Co.

Union Foundry & Machine Co.

United Engineering & Foundry Co. (Steel.)

**GEARS, MINE.**

Nuttal, R. D. Co.

**GEARS, MITRE.**

Simonds Mfg. Co.

Taylor-Wilson Mfg. Co.

Union Foundry & Machine Co.

**GEARS, MOTOR.**

Nuttal, R. D. Co.

**GEARS, RAILWAY, ELECTRIC.**

Nuttal, R. D. Co.

Westinghouse Electric & Mfg. Co.

**GEARS, RAWHIDE.**

Fawcus Machine Co.

Nuttal, R. D. Co.

Taylor-Wilson Mfg. Co.

**GEARS, REDUCTION.**

Nuttal, R. D. Co.

**GEARS, SEMI-STEEL.**

Taylor-Wilson Mfg. Co.

**GEARS, SPECIAL.**

Sommerfield Machine & Mfg. Co.

**GEARS, SPUR.**

Nuttal, R. D. Co.

Simonds Mfg. Co.

Union Foundry & Machine Co.

**GEARS, STEEL.**

Garrison, A. Foundry Co.

Mackintosh-Hemphill Co.

Mesta Machine Co.

National Gear Wheel Foundry Co.

Nuttal R. D. Co.

Pittsburgh Steel Foundry Co.

Taylor-Wilson Mfg. Co.

Union Foundry & Machine Co.

United Engineering & Foundry Co.

**GEARS, STEEL, CAST.**

Garrison, A. Foundry Co.

Mackintosh-Hemphill Co.

Mesta Machine Co.

**GEARS, STEEL, VANADIUM.**

American Vanadium Co.

**GEARS, WORM.**

Fawcus Machine Co.

Nuttal, R. D. Co.

National Gear Wheel Foundry Co.

Mesta Machine Co.

Simonds Mfg. Co.

Taylor-Wilson Mfg. Co.

Union Foundry & Machine Co.

**GENERATORS, ELECTRIC.**

Westinghouse Electric & Mfg. Co.

**GENERATORS, GAS.**

Beaver Mfg. Co. (Small plant.)

Riter-Conley Mfg. Co.

**GENERATORS, REPAIR PARTS FOR.**

Crescent Electric & Mfg. Co.

**GINGER ALE.**

Water Delivery Co. ("Polar.")

**GINGER, ESSENCE JAMAICA.**

Hollander Bros. Drug Co.

**GIRDERS, CRANE.**

Scaife, William B. & Sons Co.

**GIRDERS, FABRICATORS OF, FOR BUILDINGS.**

Kratzen, W. N. & Co.

Eichleay, John Jr., Co.

Jones & Laughlin Steel Co.

McClintic-Marshall Construction Co.

**GIRDERS, LATTICE.**

Riter-Conley Mfg. Co.

**GLASS, ART.**

Binder, B. B.

Hunt Henry.

Petgen Co., The.

Pittsburgh Art Glass & Mosaic Co.

**GLASS, BENT.**

Conroy-Prugh Co.  
Pittsburgh Plate Glass Co.  
Standard Plate Glass Co.

**GLASS, BEVELED.**

Pittsburgh Mirror Co.

**GLASS, CARRARA.**

Pittsburgh Plate Glass Co.

**GLASS, CHURCH.**

Highland Glass Co.  
Petgen Co., The. (Art, stained, leaded,  
for.)

Pittsburgh Plate Glass Co.

**GLASS, CUT.**

Fry, H. C. Glass Co.  
United States Glass Co.

**GLASS, HAMMERED.**

Highland Glass Co.

**GLASS LAMPS.**

Tarentum Glass Co.

**GLASS, LEAD, BLOWN.**

United States Glass Co.

**GLASS, LEADED.**

Hunt, Henry.  
Petgen Co., The.  
Pittsburgh Plate Glass Co.  
Rudy Bros. Co.  
Pittsburgh Art Glass & Mosaic Decorat-  
ing Co.

**GLASS, MIRROR.**

Conroy-Prugh Co.

**GLASS NOVELTIES.**

Jeannette Glass Co. (Bottle.)

**GLASS, OPAL, WHITE.** (Walls, floors,  
vaults, counter, etc.)

Opalite Tile Co., The.

**GLASS, PLATE.**

Allegheny Plate Glass Co. (Polished.)  
Conroy-Prugh Co. (Polished mirror.)  
Heidenkamp Mirror Co.  
Kittanning Plate Glass Co. (Polished.)  
Pittsburgh Plate Glass Co. (Rough.)  
Standard Plate Glass Co. (Rough and  
polished.)

**GLASS, PRISM.**

Highland Glass Co.  
Rudy Bros. Co.

**GLASS, RAILROAD AND MARINE SIGNAL.**  
("KOPPS.")

Pittsburgh Lamp, Brass & Glass Co.

**GLASS, SHEET, CRYSTAL.**

American Window Glass Co.

**GLASS, SIDEWALK.**

Co-operative Flint Glass Co.  
Jeannette Glass Co.

**GLASS, SIGNS.**

Dawes, John L. Co., The.

**GLASS, SILVERING FOR.**

Kittanning Plate Glass Co.

**GLASS, SKYLIGHT.**

Mississippi Glass Co. (Rough ribbed.)

**GLASS, STAINED.**

Hunt, Henry.  
Pittsburgh Art Glass & Mosaic Deco-  
rating Co.  
Rudy Bros. Co.  
Willett Stained Glass Co.

**GLASS SUPPLIES, MANUFACTURERS'.**

Willets Co., The.

**GLASS TILE.**

Opalite Tile Co.  
Pittsburgh Plate Glass Co.

**GLASS, VAULT.**

Co-operative Flint Glass Co.  
Opalite Tile Co.

**GLASS, WINDOW.**

American Window Glass Co.  
Conroy-Prugh Co.  
Pittsburgh Plate Glass Co.  
Pittsburgh Window Glass Co.  
Standard Plate Glass Co.

**GLASS, WIRE.**

Mississippi Glass Co.

**GLASSES, EYE.**

Elliott, B. K. Co.  
Reed Optical Co.

**GLASSES, GAUGE, STEAM.**

Macbeth-Evans Glass Co.

**GLASSES, JELLY.**

Co-operative Flint Glass Co.  
United States Glass Co. (Pressed.)

**GLASSES, MINERS' SAFETY LAMP.**

Macbeth-Evans Glass Co.

**GLASSES, SHERBET.**

Co-operative Flint Glass Co.

**GLASSES, TRADE MARK, ADVERTISING.**

Graeser Mfg. Co.

**GLASSES, WINDOW GLASS.**

Higbee, John B.

**GLASSWARE, ADVERTISING.**

Graeser Mfg. Co.

**GLASSWARE, BAR.**

McKee Glass Co.  
Tarentum Glass Co.

**GLASSWARE, LIGHTING.**

Elkins Glass Co. (Gas and electric.)  
Macbeth-Evans Glass Co. (Electric.)  
Frederick-Elder Co., The. (Electric.)  
Phoenix Glass Co. (Cut, opalescent.)  
Pittsburgh Lamp, Brass & Glass Co.  
(Electricity, gas, oil.)

**GLASSWARE, NOVELTIES.**

Tarentum Glass Co.

**GLASSWARE, PACKERS', DRUGGISTS',**

AND PHOTOGRAPHERS'.

United States Glass Co.

**GLASSWARE, TABLE.**

Co-operative Flint Glass Co. (Fancy pressed and blown.)  
 Duncan & Miller Glass Co. (Pressed.)  
 Fidelity Glass Co. (Pressed and blown.)  
 Flaccus, C. L. Glass Co. (Pressed and blown.)  
 Fry, H. C. Glass Co. (Cut, pressed and blown.)  
 Higbee, John B. Glass Co. (Blown.)  
 McKee Glass Co. (Cut, pressed.)  
 Oriental Glass Co. (Decorations in colors.)  
 Rochester Cut Glass Co. (Cut, pressed and blown.)  
 Tarentum Glass Co. (Pressed.)  
 United States Glass Co. (Cut, pressed and blown.)

**GLOBES, FISH.**

Co-operative Flint Glass Co.  
 United States Glass Co.

**GLOBES, LAMP.**

Macbeth-Evans Glass Co. (Arc.)

**GLOBES, LANTERN.**

Co-operative Flint Glass Co.  
 United States Glass Co.  
 Wormser Glass Co.  
 Macbeth-Evans Glass Co.

**GLOBES, LIGHT, ELECTRIC.**

Consolidated Lamp & Glass Co.  
 Macbeth-Evans Glass Co.  
 Phoenix Glass Co.

**GLOBES, LIGHT, GAS.**

Consolidated Lamp & Glass Co.  
 Macbeth-Evans Glass Co.

**GLOBES, LIGHT, INCANDESCENT.**

Frederick-Elder Co., The. (Inner for.)  
 Macbeth-Evans Glass Co.

**GLOVES, LEATHER, WORKMEN'S.**

Hallock, Edgar B.

**GLUE.**

Globe Glue Co.  
 Pennsylvania Glue Co.  
 Swearingen, J. C. Ink Co. (Liquid, padding.)

**GONGS, STEEL, FORGED.**

Wall, P. Mfg. Co.

**GONGS, STEEL, SEAMLESS.**

National Tube Co.

**GOOSENECKS.**

Turner, C. A., Inc.

**GOVERNORS, GAS.**

Cadman, A. W. Mfg. Co.  
 Chapman-Fulton Mfg. Co.  
 Equitable Meter Co. (Street main.)  
 Keystone Machine Co. (Engines.)  
 Merrill, Edwin C. (Gas well regulating.)

**GOVERNORS, PUMP.**

Chapman-Fulton Mfg. Co.  
 Westinghouse Air Brake Co.  
 Williams Gauge Co., The. (Steam.)  
 Wilson-Snyder Mfg. Co.

**GOVERNORS, STEAM.**

Keystone Machine Co. (For engines.)  
 Westinghouse Machine Co.  
 Williams Gauge Co., The. (Pump.)

**GRANITE, BUILDING.**

Penn Monumental Works.  
 Western Pennsylvania Marble and Granite Works.

**GRANITE, MONUMENTAL WORK.**

Campbell & Horrigan.  
 Penn Monumental Works.

**GRAPHITE.**

Lawrence, W. W. Co.  
 McCullough-Dalzell Crucible Co.

**GRATES, COAL, HARD OR SOFT, COKE OR WOOD.**

Superior Mfg. Co. ("Superior.")

**GRATES, FIRE PLACE.**

Glen Mfg. Co.  
 Knott, Harker & Co.  
 Munroe, R. & Son.

**GRATES, GAS, FIRE PLACE.**

Cullen & Brody.

**GRATES, GAS LOG, NATURAL OR ARTIFICIAL.**

Superior Mfg. Co. ("Superior.")

**GRATINGS, AREA.**

Somerville Iron & Bronze Co.

**GRATINGS, IRON.**

Buechele & Davis.  
 Charleroi Foundry & Machine Co.  
 Homestead Iron Works Co.  
 Knott, Harker & Co. (Sewer.)  
 Pittsburgh Structural Steel Co. (Ornamental.)  
 Reiling Mfg. Co.  
 Velte Foundry & Machine Co.  
 Watt Mfg. Co. (Ornamental.)

**GRATINGS, PROTECTIVE WINDOW, FOR HOSPITALS.**

Protective Window Screen Co., The.

**GRATINGS, SEWER.**

Knott, Harker & Co.

**GREASES.**

Dunlevy & Bro. Co.  
 Duquesne Oil & Supply Co.  
 Freedom Oil Works Co., The.  
 Miller's, A. D. Sons Co.  
 Pennsylvania Hide & Leather Co.  
 Pennsylvania Lubricating Co.  
 Robinson Bros.

**GREASES, ALL KINDS FOR ALL PURPOSES.**

Duquesne Oil & Supply Co.

**GREASES, AUTOMOBILE.**

Duquesne Oil & Supply Co.  
 Pennsylvania Lubricating Co.

**GREASES, AXLE.**

Duquesne Oil & Supply Co.  
 Robinson Bros.

**GREASES, BLOCK, CYLINDER, COG, CAR, CABLE, ETC.**

Duquesne Oil & Supply Co.

**GREASES, CUP.**

Robinson Bros.

**GRILLES, BRASS.**

McKenna Bros. Brass Co.  
Pittsburgh Brass Mfg. Co.  
Star Ornamental Iron & Wire Works.  
Somerville Iron & Bronze Works.  
Taylor & Dean.

**GRILLES, BRONZE.**

McKenna Bros. Brass Co.  
Pittsburgh Brass Mfg. Co.  
Star Ornamental Iron & Wire Works.  
Somerville Iron & Bronze Co.  
Taylor & Dean.

**GRILLES, IRON.**

Albree, Chester B. Iron Works.  
(Wrought.)  
Pittsburgh Structural Steel Co.  
Reiling Mfg. Co.  
Rieseck, P.  
Somerville Iron & Bronze Co.  
Star Ornamental Iron & Wire Works Co.  
Taylor & Dean. (Wrought.)  
Tyler, W. S. Co., The.  
Vilsack, Martin Co. (Wrought.)

**GRINDERS, CENTER.**

Gem Mfg. Co. (Lathe.)

**GRINDERS, CORUNDUM.**

Emerson-Smith & Co.

**GRINDERS, EMERY.**

Emerson-Smith & Co.  
Gem Mfg. Co. (Motor or rope drive,  
portable.)  
Pittsburgh Emery Wheel Co.

**GRINDERS, LABORATORY ORE.**

McKenna Bros. Brass Co.

**GRINDERS, MEAT.**

Wilson Mfg. Co.

**GRINDERS, MOWING MACHINE KNIFE.**

Ajax Mfg. Co.

**GRINDERS, ROLL, CALENDER.**

Garrison, A. Foundry Co.

**GRINDERS, SHAFT, FLEXIBLE.**

Gem Mfg. Co.

**GRIPS, AUTOMOBILE THROTTLE,  
RUBBER.**

Pennsylvania Rubber Co.

**GRIPS, ELEVATOR OPERATORS'.**

Marshall Bros.

**GRIPS, SPARK LEVER, RUBEER.**

Pennsylvania Rubber Co. (Automobile.)

**GUARDS, AUTOMOBILE.**

Keystone Sheet Metal Co.

**GUARDS, ELEVATOR, COMPRESSED AND  
FINISHED STEEL.**

Standard Gauge Steel Co.

**GUARDS, GRAVE.**

Glen Mfg. Co.

**GUARDS, MACHINERY.**

Consolidated Expanded Metal Co.

**GUARDS, SKYLIGHT.**

Rieger Iron & Wire Works.

**GUARDS, STALL.**

Rieger Iron & Wire Works.

**GUARDS, TREE.**

Glen Mfg. Co. (Wire.)  
Page Woven Wire Fence Co. (Iron.)  
Rieger Iron & Wire Works. (Iron or  
Wire.)  
Womersleys Ornamental Iron & Wire  
Co. (Wire.)

**GUARDS, WINDOW.**

Colditz & McMinn (Wire and Iron.)  
Glen Mfg. Co. (Wire.)  
Hanny, Charles G. & Co. (Wire.)  
McDowell Mfg. Co. (Wire.)  
McKenna Bros. Brass Co. (Brass and  
bronze.)  
Page Woven Wire Fence Co. (Iron and  
wire.)  
Reiling Mfg. Co. (Iron and wire.)  
Rieger Iron & Wire Works. (Iron and  
wire.)

**GUM, LABEL.**

Swearingen, J. C. Ink Co.

**GUM, VARNISH.**

Ball Chemical Co.

**GUMMERS, SAW.**

Ajaz Mfg. Co.  
Emerson-Smith & Co.

**GUTTERS, URINAL STALL.**

Standard Sanitary Mfg. Co.

**HAMES, LUMBERING,**

Pittsburgh Harness Supply Co.

**HAMES, MINE.**

Pittsburgh Harness Supply Co.

**HAMMERS, AXE.**

Iron City Tool Works.

**HAMMERS, BUSH.**

Buechle & Davis. (Limestone.)  
Iron City Tool Works.

**HAMMERS, CAT HEAD.**

Hubbard & Co.  
Iron City Tool Works.

**HAMMERS, CHIPPING.**

Iron City Tool Works.

**HAMMERS, DAGO.**

Iron City Tool Works.

**HAMMERS, DROP.**

Garrison, A. Foundry Co. (Machine.)  
United Engineering & Foundry Co.

**HAMMERS, FLOGGING.**

Iron City Tool Works.

**HAMMERS, HAND DRILLING.**

Hubbard & Co.  
Iron City Tool Works.

Klein-Logan Co.

**HAMMERS, INSPECTOR.**

Pannier Bros. Stamp Co.

**HAMMERS, MACADAM.**

Iron City Tool Works.

**HAMMERS, MACHINE DROP.**

Garrison, A. Foundry Co.

**HAMMERS, MARKING.** Matthews, James H. & Co.

**HAMMERS, NAPPING.** Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Verona Tool Works.

**HAMMERS, ORE.** Iron City Tool Works.

**HAMMERS, PAVING.** Iron City Tool Works.  
Jackson Bros. (Block stone and brick.)

**HAMMERS, PILE DRIVER, POWER.** Carlins, Thomas Sons Co.

**HAMMERS, PNEUMATIC.** Albree, Chester B. Iron Works.

**HAMMERS, RIVETING.** Hubbard & Co.  
Iron City Tool Works.

**HAMMERS, SET.** Iron City Tool Works.  
Klein-Logan Co.

**HAMMERS, SLEDGE, DRILL.** Hardsocg, Martin Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Verona Tool Works.

**HAMMERS, SORTING.** Hubbard & Co.  
Iron City Tool Works.

**HAMMERS, SPALLING.** Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.

**HAMMERS, STEAM.** Tretheway, Samuel & Co.

**HAMMERS, STONE.** Hubbard & Co.  
Iron City Tool Works.

**HAMMERS, STRIKING.** Hartsocg, Martin & Co.  
Hubbard & Co.  
Klein-Logan Co.

**HAMMERS, TESTING.** Pannier Bros. Stamp Co.

**HAMMERS, TOE.** Iron City Tool Works.

**HAMMERS, TRADESMEN'S, ALL KINDS.** American Axe & Tool Co. (Masons and bricklayers.)  
Buechele & Davis. (Bricklayers, stone workers.)  
Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co. (Blacksmiths, masons.)  
Verona Tool Co. (Blacksmiths.)

**HAMPERS, CLOTHES.** Marnhout, D. (All kinds.)  
Steel, E. T. & Sons. (Hinged cover.)

**HANDLERS, BRICK.** McDowell, J. G. Co.

**HANDLES, AXE.** American Axe & Tool Co.  
Pittsburgh Shovel Co. (Hickory.)

**HANDLES, COCKS, STOP AND WASTE, COMPRESSION.** Standard Sanitary Mfg. Co.

**HANDLES, DIE STOCK.** National Tube Co.

**HANDLES, ELECTRIC SWITCH.** Westinghouse Electric & Mfg. Co.

**HANDLES, HAMMER.** Pittsburgh Shovel Co. (Hickory.)

**HANDLES, HATCHET.** American Axe & Tool Co.  
Pittsburgh Shovel Co.

**HANDLES, LEATHER TRUNK.** Caplan, S.

**HANDLES, MALL.** Pittsburgh Shovel Co.

**HANDLES, PICK.** Pittsburgh Shovel Co.

**HANDLES, ROD, CORK FISHING.** Armstrong Cork Co.

**HANDLES, SLEDGE.** Pittsburgh Shovel Co.

**HANDLES, SWITCH, ELECTRIC.** Westinghouse Electric & Mfg. Co.

**HANDLES, TOOL, HICKORY.** Pittsburgh Shovel Co.

**HANGERS, ARC LAMP.** Hubbard & Co.  
Westinghouse Electric & Mfg. Co.

**HANGERS, BRACKET.** Jones & Laughlin Steel Co.

**HANGERS, CABLE, ELECTRIC.** Hubbard & Co.

**HANGERS, DOOR, BARN.** McKinney Mfg. Co.

**HANGERS, DROP FORGED BRAKE LOCK, FOR WAGONS.** Diamond Forging & Mfg. Co.

**HANGERS, GATE.** Lanz, M. & Son.

**HANGERS, GEAR BRAKE.** Oliver Iron & Steel Co.

**HANGERS, JOIST.** Lanz, M. & Son. (Iron and steel.)  
Oliver Iron & Steel Co. (Iron.)  
Taylor & Dean. (Iron.)

**HANGERS, MESSENGER.** Oliver Iron & Steel Co.

**HANGERS, PIPE.** Dixon, Charles E. & Son.  
Kelly & Jones Mfg. Co. (Steam.)  
National Tube Co. (Expansion.)  
Pittsburgh Valve Foundry & Construction Co. (Steam.)

**HANGERS, PIPE.**

Reliance Heater Supply Co. (Expansion steam.)  
 Steel City Electric Co. (Conduit.)  
 Turner, C. A., Inc.

**HANGERS, SHAFT.**

Jones & Laughlin Steel Co. (Self oiling.)  
 Tranter Mfg. Co. (Ball bearing.)

**HANGERS, TROLLEY WIRE, SINGLE AND DOUBLE.**

Westinghouse Electric & Mfg. Co.

**HARDWARE, CARRIAGE AND WAGON.**

Oliver Iron & Steel Co.  
 McLean & McGinness.

**HARDWARE SPECIALTIES.**

Wolverine Supply & Mfg. Co.

**HARNESS.**

Pittsburgh Harness Supply Co.

**HARPS, TROLLEY.**

Nuttal, R. D. Co.

**HASPS, CELLAR DOOR.**

Lanz, M. & Son. (Heavy.)  
 McKinney Mfg. Co. (Hinge.)

**HATCHETS, ALL KINDS.**

American Axe & Tool Co.

**HATS, SUN, FOR WOMEN.**

Sorg Mfg. Co., The.

**HEADERS, PIPE.**

Kelly & Jones Mfg. Co., The.  
 Oil Well Supply Co.

**HEADLIGHTS.**

Union Electric Co.  
 Westinghouse Electric & Mfg. Co.

**HEADS, BOILER, DISHED AND FLANGED.**

Munroe, R. & Son.

**HEADS, COKE OVEN SCRAPER.**

Pittsburgh Trolley & Forge Co.

**HEADS, COKE SCRAPER.**

Oliver Iron & Steel Co.  
 Phillips Mine & Mill Supply Co.  
 Western Tool & Forge Co.

**HEADS, MACHINE TOOL PLANER, STEEL.**

Crucible Steel Co.

**HEADS, PIPE.**

Hussey, C. G. & Co. (Copper conductor.)  
 Pittsburgh Valve Foundry & Construction Co. (Exhaust.)  
 Scaife, William B. & Sons Co. (Exhaust.)

**HEADS, STEEL FRAME, FOR MINING OPERATIONS.**

Kratzer, W. N. & Co.

**HEATERS, AIR, HOT.**

Sauer Power Generating Co.  
 Pittsburgh Cornice & Roofing Co.

**HEATERS, BARREL.**

Walsh, Morris Sons.

**HEATERS, BATHROOM.**

Penn Burner & Plating Co.  
 Superior Mfg. Co. (Artificial or natural gas.)

**HEATERS, BATH WATER.**

Homestead Heater & Mfg. Co.  
 Lawson Mfg. Co. (Automatic instantaneous.)  
 Monarch Water Heater Co. (Instantaneous.)  
 McDowell Mfg. Co.  
 Ruud Mfg. Co. (Automatic instantaneous.)  
 Snively Mfg. Co. (M. S. Lively.)  
 Standard Heater Co. (Instantaneous.)  
 Taylor Burner & Electroplating Co.

**HEATERS, ELECTRIC.**

Westinghouse Electric & Mfg. Co.  
 Adams Bros. Mfg. Co.

**HEATERS, EXHAUST.**

Munroe, R. & Son.

**HEATERS, FEED WATER.**

Elliott Co.  
 Scaife, William B. & Sons Co.

**HEATERS, FIRE PLACE.**

Marvel Burner & Mfg. Co. (Gas.)  
 Superior Mfg. Co.

**HEATERS, FOR BUILDINGS.**

McGinness Co., The.

**HEATERS, GAS.**

Adams Bros. Mfg. Co.  
 Adler, H. & Co.  
 Taylor Burner & Electroplating Co.

**HEATERS, HOT WATER.**

Iron City Heating Co.  
 Pittsburgh Water Heater Co.  
 Ruud Mfg. Co.  
 Sauer Power Generating Co.  
 Standard Heater Co.

**HEATERS, INSTANTANEOUS WATER.**

Monarch Water Heater Co.  
 Lawson Mfg. Co. (Automatic.)  
 Ruud Mfg. Co. (Automatic.)  
 Standard Heater Co.

**HEATERS, STEAM.**

Iron City Heating Co.  
 Sauer Power Generating Co.

**HEATERS, TANK.**

Beler Water Heater Co.  
 Ruud Mfg. Co. (Water.)  
 Standard Heater Co.  
 Taylor Burner & Electroplating Co.

**HEATERS, WATER.**

Beler Water Heater Co.  
 Elliott Co. (Feed.)  
 Homestead Heater & Mfg. Co. (Bath.)  
 Lawson Mfg. Co. (Range, boiler, automatic instantaneous.)  
 Monarch Water Heater Co. (Instantaneous.)  
 McDowell Mfg. Co. (Bath.)  
 Pittsburgh Water Heater Co.  
 Ruud Mfg. Co. (All kinds.)  
 Scaife, William B. & Sons Co. (Feed, hot.)  
 Standard Heater Co. (Bath, instantaneous hot, automatic, tank.)  
 Taylor Burner & Electroplating Co. (Bath, tank.)

**HEARSES, FUNERAL.**

Glesenkamp, L. & Sons Co.  
West, C. & Co.

**HIDES.**

Bricker, H. C.  
East End Hide Co.  
Mardorf, C. & Sons.  
Monongahela Melting Co.  
Pennsylvania Hide & Leather Co.  
Pittsburgh Melting Co.

**HINGES.**

Diamond Forging & Mfg. Co. (Wagon body, spring and seat.)  
Lenz, M. & Son. (Gate, harrow, hook, screw, shutter.)  
McKinney Mfg. Co. (Strap, T, butt, trunk, end gate, link.)  
Oliver Iron & Steel Co. (Screw, hook and eye.)  
Standard Sanitary Mfg. Co. (Closet.)  
Steiner & Voegtly. (Elevating casement window.)  
Turner, C. A. Inc. (Large, special.)

**HITCHINGS, MINE CAR.**

Irwin Foundry & Mine Car Co.  
Phillips Mine & Mill Supply Co.  
Standard Chain Co.  
Turner, C. A., Inc.

**HITCHINGS, SCREW.**

Oliver Iron & Steel Co.

**HOES, ACCOMAC.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.

**HOES, CLAY.**

Iron City Tool Works.  
Klein-Logan Co.

**HOES, GRUB.**

American Axe & Tool Co.  
Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.

**HOES, HAZEL.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.

**HOES, PALMETTO.**

Iron City Tool Works.

**HOES, SCUFFLE.**

Hussey-Binns Shovel Co.

**HOES, VINEYARD.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.

**HOISTS, BELT, FRICTION DRUM.**

Carlin's, Thomas Sons Co.

**HOISTS, BRICK.**

Carlin's, Thomas Sons Co.

**HOISTS, ELECTRIC.**

Carlin Machine & Supply Co.  
Carlin's, Thomas Sons Co.  
Westinghouse Electric & Mfg. Co.

**HOISTS, GASOLINE.**

Carlin Machinery & Supply Co.

**HOISTS, HAND.**

Carlin's, Thomas Sons Co.

**HOISTS, PORTABLE.**

Carlin's, Thomas Sons Co.

**HOISTS, STEAM.**

Carlin Machinery & Supply Co.  
Carlin's, Thomas Sons Co.

**HOLDERS, CHRISTMAS TREE.**

Acme Mfg. Co.

**HOLDERS, COMMUTATOR BRUSH.**

Westinghouse Electric & Mfg. Co.

**HOLDERS, GAS.**

Riter-Conley Mfg. Co.

**HOLDERS, GLOBE, ELECTRIC AND GAS LIGHT.**

Frederick-Elder Co., The.

**HOLDERS, GRAIN BAG.**

Standard Scale & Supply Co.

**HOLDERS, PEN OR PENCIL, POCKET.**

Weaver Specialty Co. ("Fit-all.")

**HOLDERS, PIPE.**

Standard Sanitary Mfg. Co.

**HOLDERS, PLATE, DOUBLE SLIDE PHOTOGRAPHIC.**

Brashear, John A. Co.

**HOLDERS, RUBBER DIE.**

Pannier Bros. Stamp Co.

**HOLDERS, SOAP.**

Standard Sanitary Mfg. Co.

**HOLDERS, TOWEL.**

Wilson Mfg. Co.

**HOLDERS, TUMBLER.**

Standard Sanitary Mfg. Co.

**HONEY.**

Tweed & Botsford.

**HOODS, AUTOMOBILE MOTOR.**

Keystone Sheet Metal Co.  
United States Aluminum Co.

**HOODS, FORGE.**

Standard Sheet Metal Mfg. Co.

**HOOKS, AGRICULTURAL.**

Oliver Iron & Steel Co.

**HOOKS, AUTOMOBILE.**

Western Tool & Forge Co.

**HOOKS, BATH ROBE.**

Standard Sanitary Mfg. Co.

**HOOKS, BEAM.**

Kelly & Jones Mfg. Co., The.

**HOOKS, BOLT, STAY CHAIN.**

Oliver Iron & Steel Co.

**HOOKS, BRASS OR BRONZE.**

McKenna Bros. Brass Co.

**HOOKS, BUSH.**  
American Axe & Tool Co.

**HOOKS, CHAIN.**  
McKay, James & Co.  
Diamond Forging & Mfg. Co. (Skid.)

**HOOKS, CHANDELIER.**  
Kelly & Jones Mfg. Co., The. (Mali.)  
National Tube Co.

**HOOKS, CRANE.**  
Patterson, W. W. Co.

**HOOKS, DOOR.**  
Lanz, M. & Son.

**HOOKS, DRIVE.**  
Lanz, M. & Son.

**HOOKS, DROP FORGED PIG TAIL.**  
Diamond Forging & Mfg. Co.

**HOOKS, ELECTRIC TRANSFORMER.**  
Westinghouse Electric & Mfg. Co.

**HOOKS, FLOOR.**  
Lanz, M. & Sons. (Pulley.)  
Oliver Iron & Steel Co.

**HOOKS, HAME.**  
Oliver Iron & Steel Co.

**HOOKS, HANGING.**  
Oliver Iron & Steel Co.

**HOOKS, HOIST.**  
Patterson, W. W. Co.

**HOOKS, LOG.**  
McKay, James & Co.  
Standard Chain Co.

**HOOKS, MEAT.**  
Gloekler, Bernard Co.

**HOOKS, MOTOR.**  
Western Tool & Forge Co.

**HOOKS, OIL WELL.**  
Patterson, W. W. Co.  
Pittsburgh Block & Mfg. Co.

**HOOKS, PAINTERS'.**  
Turner, C. A., Inc.

**HOOKS, PIPE, STEAM.**  
National Tube Co.

**HOOKS, SINGLETREE.**  
Oliver Iron & Steel Co.

**HOOKS, SPECIAL.**  
Lanz, M. & Son.

**HOOKS, STONE.**  
Turner, C. A., Inc.

**HOOKS, SWITCH.**  
McKay, James & Co.  
Standard Chain Co.

**HOOKS, WAGON SEAT.**  
Oliver Iron & Steel Co.

**HOOKS, WIRE, GUY.**  
Lanz, M. & Son.

**HOOPS, BARREL.**  
Walsh, Morris Sons.

**HOOPS, IRON.**  
Booth, J. B. & Co.

**HOOPS, SPIRAL WIRE, FOR BARRELS.**  
Pittsburgh Spiral Wire Hoop Co.

**HOOPS, STEEL.**  
Booth, J. B. & Co.  
Jones & Laughlin Steel Co.  
Carnegie Steel Co. (For slack barrel cooperage.)  
Pittsburgh Steel Co.  
West Leechburg Steel Co.

**HOOPS, TRUSS.**  
Walsh, Morris Sons.

**HOOPS, WIRE.**  
Pittsburgh Spiral Wire Hoop Co.  
(Spiral.)  
Pittsburgh Steel Co.

**HOPPERS, CAST IRON, ENAMELED.**  
McVay & Walker.

**HOPPERS, COAL.**  
Munroe, R. & Son.

**HOPPERS, ENAMELED.**  
McVay & Walker. (Cast iron.)  
Standard Sanitary Mfg. Co. (Inside.)

**HOPPERS, GAS PRODUCER, COAL.**  
Munroe, R. & Son.

**HOPPERS, PORCELAIN SLOP.**  
Standard Sanitary Mfg. Co.

**HORSE RADISH.**  
Heinz, H. J. Co.  
Lutz & Schramm.  
Tweed & Botsford.

**HORSE SHOES.**  
American Steel & Wire Co.  
Fibre Horse Shoe Co. (Fibre.)

**HORSES, CLOTHES.**  
Acme Mfg. Co.

**HOSE, ALL KINDS RUBBER.**  
Pennsylvania Rubber Co.

**HOSE, PNEUMATIC RUBBER TOOL.**  
Tuckey Bros.

**HOUSES, IRON ENGINE.**  
Riter-Conley Mfg. Co.

**HOUSES, IRON SUMMER.**  
Taylor & Dean.

**HUBS, AUTOMOBILE.**  
Liggett Spring & Axle Co.

**HYDRANTS, "MURDOCK" AND "STAR."**  
Standard Sanitary Mfg. Co.

**ICE.**  
Citizens Ice Co.  
Consolidated Ice Co.  
Pittsburgh Ice Co.  
Sewickley Ice & Supply Co.  
Standard Ice Co.  
Union Ice Co.  
Valley Ice Co.  
Washington Ice Co.

**IGNITERS, ELECTRIC BLAST.**  
Westinghouse Machine Co.

**INCINERATORS, GARBAGE.**  
American Reduction Co.

**INCLINOMETERS, DRAINAGE.**  
National Tube Co.

**INDICATORS, FLAT RATE, OVERLOAD.**  
Excess Indicator Co.

**INDICATORS, ELECTRIC CURRENT, FREQUENCY.**  
Westinghouse Electric & Mfg. Co.

**INDICATORS, SPEED.**  
Emerson-Smith & Co.

**INGOTS, ALUMINUM.**  
Aluminum Co. of America.

**INGOTS, BRASS.**  
Duquesne Reduction Co.  
Rössing Bronze Co.

**INGOTS, BRONZE.**  
Damascus Bronze Co. (Phosphor.)  
Rössing Bronze Co. (And brass composition.)

**INGOTS, COPPER.**  
Crucible Steel Co.  
Duquesne Reduction Co.

**INGOTS FOR HIGH TENSILE WORK.**  
Keystone Bronze Co.

**INGOTS, STEEL.**  
Page Woven Wire Fence Co.  
Carnegie Steel Co.  
Pittsburgh Steel Co.

**INJECTORS.**  
Chaplan-Fulton Co.

**INKS.**  
Hagar, C. C.  
Swearingen, J. C. Ink Co.

**INSERTS, FIRELESS COOKER.**  
United States Aluminum Co.

**INSERTS, STEEL, FOR BRAKE SHOE BACKS.**  
Dixon, Charles E. & Son.

**INSOLES, CORK.**  
Armstrong Cork Co.

**INSTRUMENTS, ARCHITECTS.**  
Elliott, B. K. Co.  
Kurtz, Langbein & Schwartz.  
Pittsburgh Instrument & Machine Co.

**INSTRUMENTS, ASTRONOMICAL.**  
Brashear, John A. Co.

**INSTRUMENTS, ASTROPHYSICAL.**  
Brashear, John A. Co.

**INSTRUMENTS, DRAUGHTSMAN.**  
Elliott, B. K. Co.  
Kurtz, Lanbein & Swartz.  
Pittsburgh Instrument & Machine Co.

**INSTRUMENTS, ELECTRICAL, MEASURING.**  
Stupakoff, S. H.  
Westinghouse Electric & Mfg. Co.

**INSTRUMENTS, ENGINEERS.**

Elliott, B. K. Co.  
Kurtz, Langbein & Swartz.  
Pittsburgh Instrument & Machine Co.

**INSTRUMENTS, OPTICAL.**  
Brashear, John A. Co.

**INSTRUMENTS, ORTHOPEDICAL.**  
Feick Bros. Co.

**INSTRUMENTS, PHYSICAL.**  
Brashear, John A. Co.

**INSTRUMENTS, SCIENTIFIC.**  
Brashear, John A. Co.  
Elliott, B. K. Co.  
Scientific Materials Co.

**INSTRUMENTS, SURGICAL.**  
Feick Bros. Co.

**INSTRUMENTS, SURVEYORS'.**

Elliott, B. K. Co.  
Kurtz, Langbein & Swartz.  
Pittsburgh Instrument & Machine Co.

**INSTRUMENTS, TESTING.**  
Pittsburgh Instrument & Machine Co.

**INSTRUMENTS, WIRELESS TELEGRAPH.**  
Edgecomb-Pyle Wireless Mfg. Co.

**INSULATIONS, CLOTH.**

Benolite Co.  
Standard Underground Cable Co.  
Sterling Varnish Co.  
Pennsylvania Rubber Co.

**INSULATIONS, CORK.**  
Armstrong Cork Co.

**INSULATIONS, ELECTRIC.**  
Eagle Paint & Varnish Co.  
Sterling Varnish Co.  
Union Electric Co.  
Pennsylvania Rubber Co.

**INSULATIONS, HAIR.**  
Keystone Hair Insulator Co.

**INSULATIONS FOR HEATING SYSTEMS.**  
Modern Heating Co.

**INSULATIONS, PAPER.**  
Benolite Co.  
Pennsylvania Rubber Co.  
Standard Underground Cable Co.  
Sterling Varnish Co.

**INTENSIFIERS.**  
Garrison, A. Foundry Co. (Hydraulic.)  
United Engineering & Foundry Co.

**IRON, BAR.**  
Pittsburgh Forge & Iron Co.

**IRON BILLETS.**  
Oliver Iron & Steel Co.  
Republic Iron & Steel Co.

**IRON, BOLT, ENGINE.**  
Carter Iron Co.  
Monongahela Iron & Steel Co.  
Pittsburgh Forge & Iron Co.  
Zug Iron & Steel Co.

**IRON, CHAIN.**  
Carter Iron Works.  
Monongahela Iron & Steel Co.  
Zug Iron & Steel Co.

**IRON, CHARCOAL.**

Griffith's Charcoal Iron Works.  
Brown & Co. (And refined.)

**IRON, FORGINGS.**

Zug Iron & Steel Co.

**IRON, HEXAGONS.**

Lockhart Iron & Steel Co.

**IRON, HOOP.**

Republic Iron & Steel Co.

**IRON, MACHINE KNIFE.**

Zug Iron & Steel Co.

**IRON, MALLEABLE.**

Allegheny Valley Malleable Iron Co.

**IRON, ORNAMENTAL.**

Kratzer, W. N. Co.  
Pittsburgh Structural Steel Co.  
Tyler, W. S. Co., The.

**IRON, PIG.**

Carnegie Steel Co.  
Clinton Iron & Steel Co.  
Kittanning Iron & Steel Mfg. Co.  
Republic Iron & Steel Co.  
Shenango Mfg. Co.

**IRON, SKELP.**

Carnegie Steel Co.  
Moorehead Bros. & Co.  
Republic Iron & Steel Co.

**IRON, SPECIAL FOR ELECTRICAL PURPOSES.**

Carter Iron Co.  
Monongahela Iron & Steel Co.

**IRON, STAYBOLT.**

Carter Iron Co.  
National Tube Co. (Hollow.)  
Pittsburgh Forge & Iron Co.  
Republic Iron & Steel Co.  
Zug Iron & Steel Co.

**IRON, SULPHIDE.**

Pennsylvania Salt Mfg. Co.

**IRON WORK, ARCHITECTURAL.**

McIlroy, J. D. & Son.

**IRON WORK, GALVANIZED.**

Pittsburgh Cornice & Roofing Co.

**IRON WORK, GENERAL.**

Kratzer, W. N. Co.

**IRON WORK, ORNAMENTAL.**

Kratzer, W. N. Co.  
Pittsburgh Structural Steel Co.  
Star Ornamental Iron & Wire Works Co.  
Tyler, W. S. Co., The.  
West Liberty Iron & Wire Works.  
Womersleys Ornamental Iron & Wire Works.

**IRON WORK, SHEET.**

Angermyer, W. F. Co. (Black and gal.)  
Beers, L. E. Furnace Co.  
Kossler, William & Sons.  
Miller, S. J.  
Nobbs, Grant C. & Co.

**IRON WORK, STRUCTURAL.**

Stam-Paul & Co.

**IRONS, BARGE.**

Oliver Iron & Steel Co.

**IRONS, CORNER BRACE.**

McKinney Mfg. Co.

**IRONS, DERRICK.**

Patterson, W. W. Co.  
Pittsburgh Block & Mfg. Co.

**IRONS, DOG.**

Oliver Iron & Steel Co.

**IRONS, DROP FORGED WAGON WING.**

Diamond Forging & Mfg. Co.

**IRONS, HANGER.**

Oliver Iron & Steel Co.

**IRONS, HEARTH.**

Superior Mfg. Co. ("Superior.")

**IRONS, LADDER.**

Oliver Iron & Steel Mfg. Co.

**IRONS, NECK YOKE.**

Oliver Iron & Steel Co.

**IRONS, SAD, TAILOR.**

Westinghouse Electric & Mfg. Co.

**IRONS, SOLDERING.**

Westinghouse Electric & Mfg. Co.

**IRONS, TUYERE.**

Riter-Conley Mfg. Co.

**IRONS, WAGON WING, DROP FORGED.**

Diamond Forging & Mfg. Co.

**IRONS, WHIFFLETREE.**

Oliver Iron & Steel Co.

**JACKS, AUTOMOBILE.**

Beckert, William.  
Duff Mfg. Co.

**JACKS, CAR REPLACING.**

Duff Mfg. Co.

**JACKS, HOUSE MOVING.**

Duff Mfg. Co.

**JACKS, HYDRAULIC.**

Duff Mfg. Co.

**JACKS, LEVER.**

Union Electric Co.

**JACKS, LIFTING.**

Duff Mfg. Co.

**JACKS, LOCOMOTIVE.**

Duff Mfg. Co.

**JACKS, LOG.**

Duff Mfg. Co.

**JACKS, MINING MACHINE.**

Pittsburgh Trolley & Forge Co.  
Turner, C. A., Inc.

**JACKS, PIPE FORCING.**

Duff Mfg. Co.

**JACKS, POWER.**

Duff Patents Co.

Verona Tool Works.

**JACKS, RATCHET PULLING.**

Duff Mfg. Co.  
Pittsburgh Trolley & Forge Co.  
Turner, C. A., Inc.

**JACKS, REEL.**

Duff Mfg. Co.

**JACKS, SCREW.**

Duff Mfg. Co.

**JACKS, STEAMBOAT.**

Turner, C. A., Inc.

**JACKS, STONE.**

Duff Mfg. Co.

**JACKS, TRACK.**

Duff Mfg. Co.

Union Electric Co.

Verona Tool Works.

**JACKS, TRAVERSING TRACK.**

Duff Mfg. Co.

**JACKETS, COPPER, FOR SMELTERS.**

Keystone Bronze Co.

**JACKETS, CORK.**

Armstrong Cork Co.

**JACKETS, FURNACE, SHELF.**

Riter-Conley Mfg. Co.

**JAMS AND JELLIES.**

Heinz, H. J. Co.

**JAPANS.**

Atlas Paint Co. (Baking, air drying.)  
American Cold Japan Co. (Black.)  
Eagle Paint & Varnish Co.  
Suydam, M. B. Co. (Baking, black asphaltum.)

**JARS, BATTERY, GLASS.**

Co-operative Flint Glass Co.

**JARS, BUTTER, GLASS.**

Co-operative Flint Glass Co.

**JARS, CANDY, GLASS.**

Co-operative Flint Glass Co.  
Macbeth-Evans Glass Co.  
United States Glass Co.

**JARS, CONFECTION, GLASS.**

United States Glass Co.

**JARS, DISPLAY, GLASS.**

United States Glass Co.

**JARS, FRUIT, GLASS.**

Flaccus, C. L. Glass Co.  
Hazel-Atlas Glass Co. (Mason, "E Z Seal.")  
Wormser Glass Co.

**JARS, MILK, GLASS.**

Fidelity Glass Co.  
Jeannette Glass Co.

**JARS, SCREW CAPPED MONOGRAM, GLASS.**

Crescent Bottle Co.

**JARS, STONEWARE.**

Sherwood Bros. Co.

**JAWS, BRAKE, PUSH ROD, FOR CARS.**

Western Tool & Forge Co.

**JIGS.**

Austin Tool & Machine Co.

**JOINTS, BRASS, EXPANSION.**

Kelly & Jones Mfg. Co. The.

**JOINTS, EXPANSION.**

American Foundry & Construction Co.

(Slip and copper.)

Best Mfg. Co. (Water and steam pipe.)

Kelly & Jones Mfg. Co. The. (Cast and wrought.)

National Tube Co. (Steam pipe.)

Pittsburgh Valve Foundry & Construction Co. (Swivel water and steam pipe.)

Stender Coppersmith Co., The. (Copper.)

**JOINTS, FLEXIBLE BALL.**

Best Mfg. Co.

**JOINTS, MACHINERY.**

Gem Mfg. Co.

**JOINTS, RAIL.**

Carnegie Steel Co.

**JOINTS, SLIP.**

American Foundry & Construction Co.  
Pittsburgh Valve Foundry & Construction Co.

**JOINTS, UNIVERSAL.**

Gem Mfg. Co.

**JUGS, GLASS.**

Hamilton, J. T. & A.

**JUGS, STONEWARE.**

Sherwood Bros. Co.

**KEGS, METAL POWDER.**

Enterprise Stamping Co.

**KEGS, SLACK, FOR NAILS, SPIKES, NUTS, RIVETS AND BOLTS.**

Walsh, Morris Sons.

**KEGS, WOOD.**

Bell, Edwin Co. (Bolt, nail, nut, spike.)  
Kennedy, M. T. & Son.

**KETTLES, ALUMINUM, FOR COOKING.**

Aluminum Co. of America.  
United States Aluminum Co.

**KETTLES, CANDY, COPPER.**

Stender Coppersmith Co., The.

**KETTLES, COVERED.**

Dunlap, John Co.

**KETTLES, ENAMELED BERLIN SEAMLESS.**

Dunlap, John Co.

**KETTLES, GLASS WORKERS'.**

Sommerfeld Machine & Mfg. Co.

**KETTLES, GLUE WORKERS'.**

Riter-Conley Mfg. Co.

**KETTLES, JACKETED.**

Munroe, R. & Sons.  
Stender Coppersmith Co. (Copper, steam, 5 to 500 gal.)

**KETTLES, LIPPED, PRESERVING.**

Dunlap, John Co.

**KETTLES, MIXING.**

Taylor-Wilson Mfg. Co.

**KETTLES, STOCK.**

Glockler, Bernard Co.

**KETTLES, TAR.**

Riter-Conley Mfg. Co.

Scaife, William B. &amp; Sons Co.

**KETTLES, TEA.**

Dunlap, John Co.

**KEYS, AIR VALVE.**

National Tube Co.

**KEYS, BRAKE SHOE.**Etna Forge & Bolt Co. (M. C. B.  
standard Christie.)

Oliver Iron &amp; Steel Co.

Western Tool &amp; Forge Co.

**KEYS, MACHINE, FINISHED STEEL.**

Standard Gauge Steel Co.

**KEYS, RADIATOR.**

National Tube Co.

**KEYS, SHAFTING, FINISHED STEEL.**

Standard Gauge Steel Co.

**KEYS, SPLIT.**

Oliver Iron &amp; Steel Co.

**KEYS, STREET WASHER.**Kelly & Jones Mfg. Co., The.  
National Tube Co.**KILNS, LIME BURNING.**

Riter-Conley Mfg. Co.

**KILNS, ROTATING CEMENT.**

Sterrett, Thomas Foundry Co.

**KNIVES, CORN.**

American Axe &amp; Tool Co.

**KNIVES, HAY.**

American Axe &amp; Tool Co.

**KNIVES, LUMBER.**

Emerson-Smith &amp; Co.

**KNIVES, MACHINE.**

Crucible Steel Co. (Metal shearing.)

Emerson-Smith &amp; Co.

Lippert, E. T. Saw Co. (Wood working.)

**KNIVES, OYSTER.**

Jackson Bros.

**KNIVES, PARING, NEW SAFETY CLIP.**

Frederick-Elder Co., The.

**KNIVES, PUG MILL.**

Pittsburgh Trolley &amp; Forge Co.

Turner, C. A., Inc. (For brick machines.)

**KNIVES, SHEAR.**Crucible Steel Co. (Metal machine.)  
Heppenstall Forge & Knife Co. (All kinds.)

Pittsburgh Steel Mfg. Co. (Solid steel, iron back.)

**KNIVES, SLITTING, ROTARY, ANGLE  
AND CIRCULAR.**

Tretheway, Samuel &amp; Co., Ltd. (Solid steel.)

**LABELS, BRASS.**

Matthews, James H. &amp; Co.

Pannier Bros. Stamp Co.

**LABELS IN COLORS.**

Fuller, William H.

Johnston, W. H. Co.

Pittsburgh Label &amp; Color Printing Co.

Terrace Mfg. Co.

**LABELS, PLANT AND TREE.**

Ingram-Richardson Mfg. Co.

**LACQUERS.**

Hommel, O. Co.

Sterling Varnish Co.

**LADDERS, BRASS AND BRONZE FOR  
SWIMMING POOLS.**

McKenna Bros. Brass Co.

**LADDERS, STEEL CAR.**

Western Tool &amp; Forge Co.

**LADDERS, WOOD STEP.**

Acme Mfg. Co.

**LADLES, BESSEMER PLANT.**

Carroll-Porter Boiler &amp; Tank Co.

Munroe, R. &amp; Sons.

Treadwell Construction Co.

**LADLES, FOUNDRY.**

Carroll-Porter Boiler &amp; Tank Co.

Munroe, R. &amp; Sons.

McCormack, J. S. Co.

Riter-Conley Mfg. Co.

Union Foundry &amp; Machine Co.

**LADLES, OPEN HEARTH.**

Treadwell Construction Co.

**LADLES, SOUP, ENAMELED.**

Dunlap, John Co.

**LAMPS, ALCOHOL, COPPER PLATED.**

Gem Mfg. Co.

**LAMPS, ARC.**

Kelly Lamp Co. (Gas.)

Union Electric Co. (Electric.)

Westinghouse Electric &amp; Mfg. Co.

(Electric.)

**LAMPS, AUTOMOBILE, GAS AND ELECTRIC.**

Pittsburgh Lamp, Brass &amp; Glass Co.

**LAMPS, BANQUET.**

Pittsburgh Lamp, Brass &amp; Glass Co.

**LAMPS, BRACKET.**

Consolidated Lamp &amp; Glass Co.

**LAMPS, BRASS.**

Pittsburgh Lamp, Brass &amp; Glass Co.

**LAMPS, CARBIDE, MINERS'.**

Grier Bros., Ltd.

**LAMPS, CHAIN.**

Wall, P. Mfg. &amp; Supply Co.

**LAMPS, DENTISTS'.**Pittsburgh Electric Specialties Co.  
("Dentiscope.")**LAMPS, ELECTRIC, AND ACCESSORIES.**

Nernst Lamp Co.

**LAMPS, ELECTROLIER.**

McKee Glass Co.

**LAMPS, FACTORY.**

Wall, P. Mfg. Supply Co. (Chain.)

**LAMPS, GAS.**Consolidated Lamp & Glass Co.  
Kelly Lamp Co. (Arc.)  
Pittsburgh Lamp, Brass & Glass Co.  
(Auto. portable table.)**LAMPS, GLASS.**

Tarentum Glass Co.

**LAMPS, GOLD PLATED.**

Pittsburgh Lamp, Brass &amp; Glass Co.

**LAMPS, HALL EXTENSION.**

Pittsburgh Lamp, Brass &amp; Glass Co.

**LAMPS, INCANDESCENT.**Banner Electric Co.  
Doubleday-Hill Electric Co.  
Liberty Electric Mfg. Co. (Carbon.)  
Westinghouse Electric & Mfg. Co.**LAMPS, IRON, ORNAMENTAL.**

Tyler, W. S. Co., The.

**LAMPS, LIBRARY.**

Pittsburgh Lamp, Brass &amp; Glass Co.

**LAMPS, MILL.**Dunlap, John Co.  
Wall, P. Mfg. Co.**LAMPS, MINERS'.**Ackroyd & Best, Ltd. (Safety.)  
Anton, Christopher L.  
Grier Bros., Ltd. (Oil, carbide.)  
Hardsocg, Martin Co. (Oil.)  
McClintock & Irvine. (Safety oil.)**LAMPS, MOSAIC.**

Semmer, Philip.

**LAMPS, OIL.**Dunlap, John Co. (Carbon.)  
Grier Bros., Ltd. (Miners.)  
Hardsocg, Martin Co. (Miners.)  
McClintock & Irvine. (Miners.)**LAMPS, PIANO.**

Pittsburgh Lamp, Brass &amp; Glass Co.

**LAMPS, PIT.**

Dunlap, John Co.

**LAMPS, PORTABLE TABLE.**Co-operative Flint Glass Co. (Glass.)  
McKee Glass Co. (Gas.)  
Phoenix Glass Co. (Glass.)  
Pittsburgh Lamp, Brass & Glass Co.  
(Gas.)**LAMPS, SILVER PLATED.**

Pittsburgh Lamp, Brass &amp; Glass Co.

**LAMPS, STAND, DECORATED GLASS.**

Consolidated Lamp &amp; Glass Co.

**LAMPS, STREET.**

Irwin, James.

**LAMPS, SURGEONS'.**Pittsburgh Electric Specialties Co.  
("Medico.")**LAMPS, TABLE.**Co-operative Flint Glass Co. (Portable  
glass.)  
Phoenix Glass Co. (Portable glass.)  
Pittsburgh Lamp, Brass & Glass Co.  
(Portable gas.)**LAMPS, TUNGSTEN.**

Westinghouse Electric &amp; Mfg. Co.

**LAMPS, VASE.**

Pittsburgh Lamp, Brass &amp; Glass Co.

**LARD.**

Dunlevy &amp; Bros. Co.

**LATH, EXPANDED METAL.**Consolidated Expanded Metal Co.  
Expanded Metal Fireproofing Co.**LATH, WOOD.**

Edgecomb, W. H. &amp; Sons.

**LATHES, ENGINE.**

Pittsburgh Machine Tool Co.

**LATHES, ROLL.**

United Engineering &amp; Foundry Co.

**LATHES, ROLL GRINDING.**

Garrison, A. Foundry Co.

**LATHES, ROLL TURNING.**Garrison, A. Foundry Co.  
Hyde Park Foundry & Machine Co.  
Lewis Foundry & Machine Co.  
Scaife Foundry & Machine Co.**LATHES, SCREW CUTTING.**

Pittsburgh Machine Tool Co.

**LATHES, WINDING.**Pittsburgh Machine Tool Co.  
Sommerfield Machine & Mfg. Co.**LATHING, METAL.**

Canonsburg Iron &amp; Steel Co.

**LATHING, WIRE, CORRUGATED GAL.**

Rieger Iron &amp; Wire Works.

**LATHING, WIRE, PATENT TRUSSLED STEEL.**

Rieger Iron &amp; Wire Works.

**LAUNCHES, CRUISING.**

Price, R. C. &amp; Co.

**LAVATORIES, BARBERS'.**

Standard Sanitary Mfg. Co.

**LAVATORIES, CAR AND SHIP.**

Standard Sanitary Mfg. Co.

**LAVATORIES, CAST IRON ENAMELED.**

McVay &amp; Walker.

**LAVATORIES, CORNER.**

Standard Sanitary Mfg. Co.

**LAVATORIES, FLAT BACK.**

Standard Sanitary Mfg. Co.

**LAVATORIES, HOSPITAL.**

Standard Sanitary Mfg. Co.

**LAVATORIES, PEDESTAL.**

Standard Sanitary Mfg. Co.

**LAVATORIES, PORCELAIN.**

American Porcelain Co.  
 Iron City Sanitary Mfg. Co.  
 McVay & Walker. (Enameled iron.)  
 Standard Sanitary Mfg. Co. (Enameled.)  
 United States Sanitary Mfg. Co. (Enameled.)

**LAVATORIES, PRISON.**

Standard Sanitary Mfg. Co.

**LAVATORIES, RECESS.**

Standard Sanitary Mfg. Co.

**LAVATORIES, SECTIONAL.**

Standard Sanitary Mfg. Co.  
 United States Sanitary Mfg. Co.

**LAVATORIES, TRIMMED.**

Standard Sanitary Mfg. Co.

**LEAD, GLASSMAKERS'.**

National Lead & Oil Co.

**LEAD, PIG.**

Pennsylvania Smelting Co.  
 Pittsburgh White Metal Co.

**LEAD PIPE.**

National Lead & Oil Co.

**LEAD, RED.**

National Lead & Oil Co.  
 Nevin, T. H. Co.

**LEAD, RED, IN OIL.**

Nevin, T. H. Co.

**LEAD, RED PAINT.**

Sterling Varnish Co.  
 Suydam, M. B. Co.

**LEAD, SHEET.**

National Lead & Oil Co.

**LEAD, SULPHATE.**

Pennsylvania Salt Mfg. Co.

**LEAD, VARNISHMAKERS'.**

National Lead & Oil Co.

**LEAD, WHITE.**

Eagle Paint & Varnish Works.  
 National Lead & Paint Co.  
 Nevin, T. H. Co.

**LEAD, WHITE, IN OIL.**

Atlas Paint Co.  
 Nevin, T. H. Co.  
 Thompson & Co.

**LEAD, WHITE PAINT.**

Sterling Varnish Co.  
 Suydam, M. B. Co.

**LEATHER, BAG.**

Wettach & Co.

**LEATHER, BUFFED, HAND OR MACHINE.**

Standard Leather Co.

**LEATHER, CASE.**

Wettach & Co.

**LEATHER GOODS.**

Boyd, Boyd & Boyd Trunk Co.  
 Capital Trunk & Bag Co.  
 Caplan's, S.  
 Emergency Trunk & Bag Co.

**LEATHER, GRAIN.**

Standard Leather Co.

**LEATHER, HARNESS.**

Flaccus, William Oak Leather Co.  
 Stifel, Charles F. Co. (Oak.)

**LEATHER, RUSSET.**

Standard Leather Co.

**LEATHER, SADDLERY.**

Standard Leather Co.

**LEATHER, SKIRTING.**

Flaccus, William Oak Leather Co.

**LEATHER, SOLE.**

Flaccus, William Oak Leather Co.

**LEATHER, SPLIT.**

Standard Leather Co.

**LEATHER, STRAP.**

Wettach & Co.

**LEGS, LAVATORY.**

Standard Sanitary Mfg. Co.

**LEGS, SINK.**

Standard Sanitary Mfg. Co.

**LEHRS, ANNEALING.**

Dixon, H. L. Co. (For flint, rolled and  
 plate glass.)

**LEHRS, DECORATING GLASS.**

Dixon, H. L. Co.

**LENSES, AUTOMOBILE LAMP.**

Fry, H. C. Glass Co.  
 Macbeth-Evans Glass Co.

**LENSES, PHOTOGRAPHIC.**

Brashear, John A. Co.

**LENSES, RAILROAD, SIGNAL.**

Macbeth-Evans Glass Co.

**LENSES, SPECTACLE.**

Elliott, B. K. Co.

**LENSES, SPECTROSCOPIC.**

Brashear, John A. Co.

**LENSES, VISUAL.**

Brashear, John A. Co.

**LETTERS, BRONZE.**

Somerville Iron & Bronze Co.

**LETTERS, FOUNDRY.**

Matthews, James H. & Co.

**LETTERS, HOUSE.**

Matthews, James H. & Co.  
 Somerville Iron & Bronze Co.  
 (Bronze.)

**LETTERS, PATTERN.**

Matthews, James H. & Co.

**LETTERS, SIGN.**

Matthews, James H. & Co.  
 Somerville Iron & Bronze Co.  
 (Bronze.)

**LEVELS, TRACK.**

Verona Tool Works.

**LEVERS, AUTOMOBILE.**  
Western Tool & Forge Co.

**LEVERS, BRAKE SHOE.**  
Oliver Iron & Steel Co.

**LEVERS, DROP FORGED FOR BRAKE.**  
Diamond Forging & Mfg. Co.

**LEVERS, FOR AIR VALVES.**  
Dixon, Charles E. & Sons.

**LEVERS, FOR MOTORS.**  
Western Tool & Forge Co.

**LEVERS, FOR SHAKING GRATES.**  
Dixon, Charles E. & Son.

**LIDS, JOURNAL BOX, STEEL.**  
Union Spring & Mfg. Co.

**LIFTERS, MANHOLE.**  
Pittsburgh Block & Mfg. Co.

**LIFTERS, SASH.**  
McKinney Mfg. Co.

**LIFTS, MOTOR ARMATURE.**  
Duff Mfg. Co.

**LIGHTS, SIDEWALK.**  
Colditz & McMinn.  
Rieseck, P.

**LIGHTS, VAULT.**  
Rieseck, P.

**LIMBS, ARTIFICIAL.**  
Best Artificial Limb & Mfg. Co.  
Feick Bros. Co.  
National Artificial Limb & Brace Mfg.  
Co.  
Pittsburgh Orthopedic Co.

**LIME.**  
Crescent Portland Cement Co. (Lump  
and ground.)  
McKallip & Co.  
Pennsylvania Salt Mfg. Co. (Chloride  
bleach.)

**LIMESTONE, CRUSHED AND FLUXING.**  
Blair, Reed F. & Co.

**LININGS, BLAST FURNACE, CUPOLA.**  
Harbison-Walker Refractories Co.  
Manown Mfg. Co.  
Pittsburgh Clay Pottery Co.

**LININGS, CAR HEAD, ASBESTOS PRO-  
TECTED.**  
Asbestos Protected Metal Co.

**LININGS, FIRE PLACE.**  
Knott, Harker & Co.  
Superior Mfg. Co. ("Superior" iron.)

**LININGS, FLUE.**  
American Sewer Pipe Co.  
Union Sewer Pipe Co.

**LININGS, PLUNGER AND CUP FOR OIL  
WELL FITTING.**  
Evans Mfg. Co., The.

**LININGS, REFRIGERATOR, ENAMELED.**  
Ingram-Richardson Mfg. Co.

**LININGS, ROTARY CEMENT GLOBE.**  
Harbison-Walker Refractories Co.

**LINKS, CAR COUPLER.**  
Carnegie Steel Co.  
Jones & Laughlin Steel Co.  
Oliver Iron & Steel Co.  
Pittsburgh Forge & Iron Co.  
Standard Chain Co.  
Western Tool & Forge Co.

**LINKS, CHAIN REPAIR.**  
Standard Chain Co.  
McKay, James Co.

**LINKS, FUSIBLE.**  
Lanz, M. & Sons.

**LINOLEUMS, INLAID CORK, PLAIN AND  
PRINTED.**  
Armstrong Cork Co.

**LINTELS, CONCRETE.**  
Concrete Products Co.

**LIQUIDS, BRONZING.**  
Hommel, O. Co.

**LITHARGE.**  
National Lead & Oil Co.  
Nevin, T. H. Co.  
Sterling Varnish Co.

**LITHOGRAPHING.**  
Fort Pitt Lithographing Co.  
Republic Bank Note Co.

**LOCKERS, METAL.**  
McKeesport Plate Co.

**LOCKERS, SHEET METAL.**  
Keighley, S. Metal Ceiling & Mfg. Co.  
Standard Sheet Metal Mfg. Co.  
Taylor & Dean.

**LOCKERS, WIRE.**  
Rieger Iron & Wire Works.

**LOCKS, CHAIR, FOR CONCRETE REIN-  
FORCING.**  
Electric Welding Co.

**LOCKS, COMBINATION.**  
Barnes Safe & Lock Co.

**LOCKS, NUT.**  
Keystone Nut Lock Co. (Freight and  
passenger cars.)  
Verona Tool Works.  
Western Tool & Forge Co.

**LOCKS, SAFE.**  
Barnes Safe & Lock Co.  
United States Safe Co.

**LOCKS, TIME.**  
Barnes Safe & Lock Co.

**LOCOMOTIVES.**  
American Locomotive Co. (All kinds.)

**LOCOMOTIVES, COMPRESSED AIR.**  
Porter, H. K. Co.

**LOCOMOTIVES, ELECTRIC.**  
Orenstein, Arthur Koppel Co. (Indus-  
trial.)  
Porter, H. K. Co.  
Westinghouse Electric & Mfg. Co.

**LOCOMOTIVES, ELECTRIC MINING.**  
Westinghouse Electric & Mfg. Co.

**LOCOMOTIVES, INDUSTRIAL.**

Orenstein, Arthur Koppel Co. (Electric and steam.)  
 Porter, H. K. Co.  
 Westinghouse Electric & Mfg. Co. (Electric.)

**LOCOMOTIVES, LIGHT.**

Porter, H. K. Co.  
 Rees, James & Son.

**LOCOMOTIVES, LOGGING.**

Porter, H. K. Co.

**LOCOMOTIVES, OIL BURNING.**

Porter, H. K. Co.

**LOCOMOTIVES, PNEUMATIC.**

Porter, H. K. Co.

**LOCOMOTIVES, STEAM.**

Orenstein, Arthur Koppel Co. (Industrial.)  
 Porter, H. K. Co.

**LOGS, GAS.**

Penn Burner & Plating Co.  
 Superior Mfg. Co.

**LONGSCREWS.**

Kelly & Jones Mfg. Co., The. (Wrought.)  
 National Tube Co.

**LOUVERS.**

Keystone Sheet Metal Co.  
 Standard Sheet Metal Mfg. Co.

**LUBRICANTS, HYDRAULIC ELEVATOR.**

Strunz, S. & Son.

**LUBRICATORS, BRASS FEED, SIGHT.**

Kelly & Jones Mfg. Co., The.

**LUBRICATORS, BRASS, PLAIN.**

Kelly & Jones Mfg. Co., The.

**LUBRICATORS, LOOSE PULLEY.**

Gem Mfg. Co.

**LUBRICATORS, OIL COUNTRY.**

Kelly & Jones Mfg. Co., The.

**LUBRICATORS, PNEUMATIC TOOL.**

Carron, A. M. & Co.

**LUGS, HINGE.**

Rieseck, P.

**LUGS, TANK.**

Lanz, M. & Son.

**LUMBER MILL WORK.**

Ahlers Lumber Co.  
 Anderson, T. J. & Co.  
 Barnes, Robert J.  
 Beaver Falls Planing Mill Co.  
 Bruckman Lumber Co.  
 Diebold Lumber & Mfg. Co.  
 Dubarry, G. D. & Co.  
 Eiler Lumber & Mill Co.  
 Feath & Kerr.  
 Hill, Edwin M.  
 May Lumber Co.  
 Pennsylvania Door & Sash Co.  
 Pittsburgh Hardwood Door Co.  
 Simons, M. Sons.  
 Wigman Lumber Co.  
 Wilkinsburg Stair & Mfg. Co.  
 Young, W. F. Co.  
 Zeigler Lumber Co.

LYE, "LEWIS," "AMERICAN," "SAPONIFIER," "GREENWICH."  
 Pennsylvania Salt Mfg. Co.

**MACARONI.**

Boehm, John & Co.

**MACHINE SHOPS.**

American Foundry & Construction Co.  
 Austin Tool & Machine Co.  
 Combination Engine Works.  
 Csabina, E.  
 Dixon, Charles E. & Sons.  
 Fischer Foundry Co.  
 Globe Mfg. Supply Co.  
 Keystone Machine Co.  
 Ninth Avenue Garage.  
 Pfaller, Frank.  
 Pittsburgh Reinforced Brazing & Machine Co.  
 Rogers Bros.  
 Simonds Mfg. Co.  
 Standard Machine Co.  
 Swain & Anglin Co.  
 Wilhelm, Robert.  
 Yost Bros.  
 Shamborg & Allen.

**MACHINERY, ACETYLENE GAS.**

Beaver Mfg. Co.

**MACHINERY, ARTESIAN WELL.**

Keystone Driller Co.  
 Masseh Packer & Machine Co.

**MACHINERY, AXLE CENTERING.**

Fawcus Machine Co.

**MACHINERY, BAND SAW.**

Garrison, A. Foundry Co.

**MACHINERY, BENDING.**

Garrison, A. Foundry Co.  
 Mackintosh-Hemphill & Co.

**MACHINERY, BLAST FURNACE.**

Heyl & Patterson Co. (Labor saving.)  
 Rosedale Foundry & Machine Co.  
 Braddock Machine & Mfg. Co.

**MACHINERY, BORING.**

Ajax Mfg. Co. (Automatic wood.)  
 Herron-Webb Engineering Co. (Metal armature.)

**MACHINERY, BOTTLERS AND BREWERS.**

Loew Mfg. Co.

**MACHINERY, CEMENT WORKS.**

Rosedale Foundry & Machine Co.

**MACHINERY, COAL HANDLING.**

Heyl & Patterson Co. (Labor saving.)  
 Milholland, J. & J. B.  
 Pittsburgh Coal Washer Co.  
 Pittsburgh Conveying Machinery Co.

**MACHINERY, COAL MINING.**

Milholland, J. & J. B.  
 Pittsburgh Conveying Machinery Co.

**MACHINERY, COAL WASHING.**

Heyl & Patterson Co. (Labor saving.)  
 Pittsburgh Coal Washer Co.

**MACHINERY, CONVEYING.**

Carlin's, Thomas Sons Co.  
 Heyl & Patterson Co. (Labor saving.)  
 Riter-Conley Mfg. Co.

**MACHINERY, COKE OVEN.**  
Taylor-Wilson Mfg. Co.

**MACHINERY, CORE MAKING, FOUNDRY.**  
McCormack, James S. & Co.

**MACHINERY, COUPLING.**  
Union Foundry & Machine Co.

**MACHINERY, CUTTING OFF AXLE.**  
Fawcus Machine Co.

**MACHINERY, DREDGING.**  
Goodman Machine Co.

**MACHINERY, DRILLING, ELECTRIC.**  
Gem Mfg. Co.

**MACHINERY, DRILLING, FLEXIBLE SHAFT.**  
Gem Mfg. Co.

**MACHINERY, DRILLING, HAND POWER.**  
Gem Mfg. Co.

**MACHINERY, DRILLING, TRACTION WELL.**  
Keystone Driller Co.

**MACHINERY, ELECTRIC, OF EVERY DESCRIPTION.**  
Westinghouse Electric & Mfg. Co.

**MACHINERY, ELECTRIC POLISHING.**  
Gem Mfg. Co.

**MACHINERY, ELEVATING.**  
Carlin's, Thomas Sons Co.

**MACHINERY, EMBOSSED.**  
Garrison, A. Foundry Co.

**MACHINERY, EMERY WHEEL, SWING FRAME GRINDING.**  
Pittsburgh Emery Wheel Co.

**MACHINERY, EXPANDED METAL.**  
Garrison, A. Foundry Co.

**MACHINERY, EXPERIMENTAL.**  
Carron, A. M & Co.

**MACHINERY, FOR MAKING FIBRE AND STEEL REINFORCED PACKAGES; AND MATERIAL USED IN THEIR CONSTRUCTION.**  
Fibre Barrel Machinery & Mfg. Co.

**MACHINERY, FORGING.**  
Garrison, A. Foundry Co.

**MACHINERY, GAS PUMPING.**  
Oil Well Supply Co.

**MACHINERY, GLASS HOUSE.**  
Knott & Harker Co.  
Leng, Charles.  
Miller, William J.  
Rochester Mold & Machine Co.  
Rosedale Foundry & Machine Co.  
Sommerfield Machine & Mfg. Co.  
Taylor-Wilson Mfg. Co.

**MACHINERY, GLASS PLATE.**  
Braddock Machine & Mfg. Co.

**MACHINERY, HOOP.**  
Garrison, A. Foundry Co.

**MACHINERY, HYDRAULIC.**  
Duff Mfg. Co.  
Hyde Park Foundry & Machine Co.  
Garrison, A. Foundry Co.

**MACHINERY, ICE.**  
Pittsburgh Conveying Machinery Co.

**MACHINERY, ICE CREAM.**  
Knorr, W. L.

**MACHINERY, ICE CREAM CONE MAKING.**  
Hoerle, W. M.

**MACHINERY, LABOR SAVING.**  
Heyl & Patterson Co.

**MACHINERY, METAL BORING, ARMATURE FOR BEARINGS.**  
Herron-Webb Engineering Co.

**MACHINERY, METAL FRAME.**  
Garrison, A. Foundry Co.

**MACHINERY, METAL FURNITURE.**  
Garrison, A. Foundry Co.

**MACHINERY, METAL SAWING, HOT AND COLD.**  
Mackintosh-Hemphill & Co.

**MACHINERY, MILL, PIPE.**  
Braddock Machine & Mfg. Co.  
Garrison, A. Foundry Co.  
Rosedale Foundry & Machine Co.  
Taylor-Wilson Mfg. Co.  
Union Foundry & Machine Co.

**MACHINERY, MILL, ROLLING.**  
Braddock Machine & Mfg. Co.  
Carlin's, Thomas Sons Co.  
Fawcus Machine Co.  
Lewis Foundry & Machine Co.  
Mackintosh-Hemphill & Co.  
Mesta Machine Co.  
McGill & Co.  
Rosedale Foundry & Machine Co.  
Standard Engineering Co.  
Sterrett, Thomas Foundry & Machine Co.  
Taylor-Wilson Mfg. Co.

**MACHINERY, MILL, TIN PLATE.**  
Hyde Park Foundry & Machine Co.  
Union Foundry & Machine Co.

**MACHINERY, MILL, TUBE.**  
Braddock Machine & Mfg. Co.

**MACHINERY, MINING.**  
Milholland, J. & J. B.  
Pittsburgh Conveying Machine Co.  
Union Foundry & Machine Co.

**MACHINERY, MINING, AUGER TYPE DRILL.**  
Hardsocg, Martin Co.

**MACHINERY, NUMBERING.**  
Matthews, James H. & Co.

**MACHINERY, ORE WASHING.**  
Heyl & Patterson Co.

**MACHINERY, PILE DRIVING.**  
Carlin's, Thomas Sons Co.

**MACHINERY, PIPE CUTTING.**

Oil Well Supply Co.

**MACHINERY, POTATO MASHING, FOR HOTELS.**

Gloekler, Bernard Co.

**MACHINERY, POTTERY.**

Knott &amp; Harker Co.

**MACHINERY, PRINTING.**

Csabina, E.

**MACHINERY, PUMPING.**

Epping Carpenter &amp; Co.

Oil Well Supply Co. (Gas.)

**MACHINERY, PUNCHING.**

Garrison, A. Foundry Co.

Mackintosh-Hemphill &amp; Co. (I-beam.)

**MACHINERY, REAMING.**

Gem Mfg. Co.

**MACHINERY, REFRIGERATING.**

Pittsburgh Conveying Machinery Co.

**MACHINERY, RIVETING.**

Mackintosh-Hemphill &amp; Co.

**MACHINERY, SAND DIGGING.**

Goodman Machine Co.

**MACHINERY, SAND PRODUCING.**

Phillips &amp; McLaren.

**MACHINERY, SAW SHARPENING.**

Hunter Saw &amp; Machine Co.

**MACHINERY, SAWING, METAL.**Garrison, A. Foundry Co. (Hot.)  
Mackintosh-Hemphill & Co.**MACHINERY, SHEARING.**

Garrison, A. Foundry Co.

Mackintosh-Hemphill &amp; Co.

Union Foundry &amp; Machine Co.

**MACHINERY, SHOVEL.**

Garrison, A. Foundry Co.

**MACHINERY, SPECIAL.**

Axthelm Machinery Co.

Braddock Machine &amp; Mfg. Co.

Bucksman Machinery &amp; Supply Co.

Dauber, R. H.

Eagle Tool &amp; Machine Co.

Early, W. J. &amp; Sons.

Fawcett Machine Co.

Gazzam, H. P. Machine Co.

Gillespie Machine Co.

Gillespie Mfg. Co.

Globe Mfg. Co.

Koontz, H. J.

Lawrenceville Machine Co.

Mesta Machine Co.

McSherry Mfg. Co.

Nuttal, R. D. &amp; Co.

Pittsburgh Machine Tool Co.

Pittsburgh Reinforced Brazing &amp; Machine Co.

Rogers Bros.

Sigwart &amp; Ralston.

Simonds Mfg. Co.

Sommerfield Machine &amp; Mfg. Co.

Standard Engineering Co.

Standard Machine Co.

Sterrett, Thomas Foundry Co.

Taylor-Wilson Mfg. Co.

United Engineering &amp; Foundry Co.

**MACHINERY, SHOVEL HANDLE.**

Union Foundry &amp; Machine Co.

**MACHINERY, SPECIALTIES.**

Carnegie Plow &amp; Mfg. Co.

**MACHINERY, STAMPING.**

Garrison, A. Foundry Co.

**MACHINERY, STONE POLISHING.**

Pittsburgh Crushed Steel Co.

**MACHINERY, STOVE PIPE.**

Alexander Bros.

**MACHINERY, STRAIGHTENING.**

Mackintosh-Hemphill &amp; Co.

**MACHINERY, SWING FRAME GRINDING.**

Pittsburgh Emery Wheel Co.

**MACHINERY, TAPPING.**

Gem Mfg. Co.

**MACHINERY, TINNING.**

Union Foundry &amp; Machine Co.

**MACHINERY, VACUUM CLEANING.**

Electric Renovator Mfg. Co.

**MACHINERY, VALVE TESTING.**

Westinghouse Air Brake Co.

**MACHINERY, WELL.**

Keystone Driller Co.

Oil Well Supply Co.

**MACHINERY, WELL SINKING.**

Keystone Driller Co.

Oil Well Supply Co.

**MACHINERY, WINDOW GLASS.**

Goodman Machine Co.

**MACHINERY, WIRE BARBING.**

Braddock Machine &amp; Mfg. Co.

**MACHINERY, WOOD WORKING.**

Csabina, E.

**MACHINES, ADDRESSING, TIN TAG.**

Matthews, James H. &amp; Co.

**MACHINES, AXLE CUTTING OFF AND CENTERING.**

Fawcett Machine Co.

**MACHINES, BLOWING, BOTTLE.**

Gillespie Mfg. Co.

**MACHINES, CASTING.**

Heyl &amp; Patterson. (Pig iron.)

Pittsburgh Instrument &amp; Machine Co. (Steel.)

**MACHINES, CATCHERS FOR TIN MILLS.**

Gillespie Mfg. Co.

**MACHINES, CENTERING, AXLE.**

Fawcett Machine Co.

**MACHINES, CHARGING, PLATE.**

Taylor-Wilson Mfg. Co.

**MACHINES, CHUTES, FOR TIN MILLS.**

Gillespie Mfg. Co.

**MACHINES, CONVEYOR, FOR TIN MILLS.**

Gillespie Mfg. Co.

**MACHINES, CORRUGATING.**

Lewis Foundry & Machine Co.  
United Engineering & Foundry Co.

**MACHINES, COUPLING.**

Taylor-Wilson Mfg. Co. (Pipe mill.)  
United Engineering & Foundry Co.

**MACHINES, CRUSHING.**

American Steel Foundry Co.

**MACHINES, CUTTING OFF.**

Fawcett Machine Co. (Axes.)  
Standard Engineering Co.  
Taylor-Wilson Mfg. Co.

**MACHINES, DISH WASHING.**

Demmler & Schenck Co.

**MACHINES, FEED TABLE.**

Lewis Foundry & Machine Co.

**MACHINES, FILLING AND CLOSING, FOR COLLAPSIBLE TUBES.**

Diamond Specialty & Tube Co.

**MACHINES, GEAR MOULDING.**

Taylor-Wilson Mfg. Co.

**MACHINES, GLASS CUTTING, CIRCULAR.**

Klages, George W.

**MACHINES, GLASS HANDLING.**

Heyl & Patterson.

**MACHINES, GLAZING, GLASS.**

Rochester Mold & Machine Co.

**MACHINES, GRINDING, EDGE FOR GLASS.**

Rochester Mold & Machine Co.

**MACHINES, HAULAGE, STEAM AND ELECTRIC.**

Diamond Machine Co.

**MACHINES, LABOR SAVING.**

Heyl & Patterson.

**MACHINES, PICKLING.**

Mesta Machine Co.

**MACHINES, PIPE.**

Standard Engineering Co.  
Taylor-Wilson Mfg. Co.  
United Engineering & Foundry Co.

**MACHINES, POLISHING, FOR TIN MILLS.**

Gillespie Mfg. Co.

**MACHINES, PROSPECTING, WELL.**

Keystone Driller Co.

**MACHINES, REAMING, PIPE SOCKET.**

Taylor-Wilson Mfg. Co.  
Gem Mfg. Co.

**MACHINES, ROLLING.**

United Engineering & Foundry Co.

**MACHINES, SAND BLAST, FOR GLASS WORKS.**

Rochester Mold & Machine Co.

**MACHINES, SCARFING.**

Taylor-Wilson Mfg. Co. (Plate.)

United Engineering & Foundry Co.

**MACHINES, SKELP BENDING.**

United Engineering & Foundry Co.

**MACHINES, STRAIGHTENING.**

Taylor-Wilson Mfg. Co. (Pipe.)  
United Engineering & Foundry Co.

**MACHINES, TAPPING.**

Gem Mfg. Co.  
Taylor-Wilson Mfg. Co. (Pipe socket.)

**MACHINES, TESTING.**

Doubleday-Hill Electric Co. (Electric.)  
Taylor-Wilson Mfg. Co. (Pipe.)  
United Engineering & Foundry Co.  
(Pipe.)

**MACHINES, THRESHING, BUILDERS OF.**

Duquesne Co, The.

**MACHINES, TINNING.**

Lewis Foundry & Machine Co.

**MACHINES, TYPEWRITING, VISIBLE.**

Pittsburgh Visible Typewriter Co.

**MACHINES, WELDING, FOR PIPE MILLS.**

Taylor-Wilson Mfg. Co.

**MACHINES, WELL DRILLING, PORTABLE.**

Keystone Driller Co.

**MACHINES, WOOD BORING.**

Ajax Mfg. Co.

**MAGNETS, ELECTRIC.**

Doubleday-Hill Electric Co.  
Westinghouse Electric & Mfg. Co.

**MALLETS.**

Buechel & Davis. (Stone cutters.)  
Pennsylvania Rubber Co. (Rubber.)

**MANDRELS, SAW.**

Emerson, Smith & Co.

**MANGANESE.**

Carnegie Steel Co. (Ferro, ferro silicon.)  
Finkell-Hachmeister Chemical Co.  
(Oxide, chloride.)

**MANHOLES.**

Munroe, R. & Sons.

**MANIPULATORS.**

Garrison, A. Foundry Co.  
Mackintosh-Hemphill & Co.  
Mesta Machine Co.  
United Engineering & Foundry Co.

**MANTELS, BRICK.**

Cullen & Brody.

**MANTELS, TILE, ARTISTIC.**

Cullen & Brody.

**MANTELS, WOOD.**

Commercial Sash & Door Co. (Pine.)  
Morris, Graf & Co. (Architectural.)  
National Lumber Co.  
Wilkinsburg Stair & Mfg. Co.

**MANTLES, GAS, INCANDESCENT.**

Beacon Lighting Co.  
Fibre Gas Mantle Mfg. Co.  
Fruchs Inc. Gas Light Works.  
Hipwell Mfg. Co.

**MARBLE, BUILDING, CUT.**

Penn Monumental Works.  
Western Pennsylvania Marble & Granite  
Works.

**MARBLE MONUMENTS.**

Penn Monumental Works.

**MATS, BATH, CORK.**

Armstrong Cork Co.

**MATS, DOOR, WIRE.**

Keystone Wire Matting Co.

**MATS, FOLDING.**

Glen Mfg. Co. (Iron, steel and wire.)

**MATS, GYMNASIUM.**

Logan, A. J. Co.

**MATS, RUBBER.**

Pennsylvania Rubber Co.

**MATS, STEEL.**

Glen Mfg. Co. (Folding.)

Keystone Wire Matting Co. (Flexible.)

**MATS, TABLE, CORK.**

Armstrong Cork Co.

**MATS, WIRE FOLDING.**

Glen Mfg. Co.

**MATS, WOOD.**

Keystone Wire Matting Co.

**MATTING.**

Keystone Wire Matting Co. (Wire, wood and steel.)

**MATTOCKS, ASPHALT.**

Hubbard &amp; Co.

Klein-Logan Co.

**MATTOCKS, BUSH.**

Iron City Tool Works.

Klein-Logan Co.

**MATTOCKS, GRUB.**

Oliver Iron &amp; Steel Co.

**MATTOCKS, LONG CUTTER.**

Oliver Iron &amp; Steel Co.

Hubbard &amp; Co.

Iron City Tool Works.

**MATTOCKS, LONG AND SHORT, HUNT EYE.**

Iron City Tool Works.

**MATTOCKS, NURSERY.**

Iron City Tool Works. (Double blade.)

Klein-Logan Co.

**MATTOCKS, OIL RIGGERS'.**

Iron City Tool Works.

**MATTOCKS, PANAMA.**

Iron City Tool Works.

**MATTOCKS, PICK.**

Hubbard &amp; Co.

Iron City Tool Works.

Klein-Logan Co.

Oliver Iron &amp; Steel Co.

**MATTOCKS, PROSPECTING.**

Iron City Tool Works.

**MATTOCKS, SHORT CUTTER.**

Hubbard &amp; Co.

Iron City Tool Works.

Klein-Logan Co.

Oliver Iron &amp; Steel Co.

**MATTRESSES.**

Diamond Mattress Co.

Fort Pitt Bedding Co.

Gross, H. E. &amp; Co.

Logan, A. J. Co.

Pittsburgh Iron Folding Bed Co.

Thompson &amp; Co.

**MAULS, COAL.**

Iron City Tool Co.

**MAULS, SHIP.**

Iron City Tool Works.

Klein-Logan Co.

Verona Tool Works.

**MAULS, SPIKE.**

Hubbard &amp; Co.

Iron City Tool Works. (Railroad.)

Klein-Logan Co.

Verona Tool Works. (Railroad.)

**MAULS, TOP SHIP.**

Hubbard &amp; Co.

**MAULS, WOOD.**

Iron City Tool Works. (Truckee, Washington.)

Pittsburgh Block &amp; Mfg. Co. (Gum.)

Pittsburgh Shovel Co. (Hickory.)

**MAULS, WOOD, STRAIGHT CUT.**

Iron City Tool Works.

**MAULS, WOODCHOPPERS'.**

Hubbard &amp; Co.

Iron City Tool Works.

Klein-Logan Co.

**MEAT PACKERS.**

Armour &amp; Co.

Denholm, J. M. Bros. &amp; Co.

Dunlevy &amp; Bro.

Fried &amp; Reinemen.

Kingan &amp; Co.

Rea &amp; Co.

Zoller, William &amp; Co.

**MELTERS, GLASS.**

Pittsburgh Clay Pottery Co.

**MESH, EXPANDED METAL, FOR CONCRETE REINFORCING.**

Consolidated Expanded Metal Co.

**METAL, ACID PROOF.**

Cadman, A. W. Mfg. Co.

Lawrenceville Bronze Co.

**METAL, ANTI-FRICTION.**

Pittsburgh White Metal Co.

**METAL, ASBESTOS PROTECTED, FOR BUILDINGS.**

Asbestos Protected Metal Co.

**METAL, BABBITT.**

Cadman, A. W. Mfg. Co.

Damascus Bronze Co.

Katz &amp; Son.

Keystone Bronze Co.

Lawrenceville Bronze Co.

National Lead &amp; Oil Co.

Newlands Bros.

Pittsburgh Smelting &amp; Refining Co.

Pittsburgh White Metal Co.

Roessing Bronze Co.

**METAL, ELECTROTYPE.**

National Lead &amp; Oil Co.

**METAL MESH, EXPANDED, FOR REINFORCING CONCRETE.**  
Consolidated Expanded Metal Co.

**METAL, MOLDING.**  
National Metal Molding Co.

**METAL, NON-CORROSIVE.**  
Vanadium Metals Co.

**METAL REFINERS.**  
Monongahela Furnace Co.

**METAL, SHEET, TIN PLATE, FOR ALL PURPOSES.**  
American Sheet & Tin Plate Co.

**METAL SIGNS.**  
Dawes, John L. Co., The.

**METAL STAMPINGS.**  
Forster, J. C. & Son.  
McCombs, William P. Co.

**METAL, TERNE.**  
Pittsburgh Smelting & Refining Co.

**METAL, WORKERS IN SHEET.**  
Andre, L. A. & Co.  
Fuhrer, A. G.  
Hammer, C. Otto.  
Hoerle, W. M.  
Kohler, Paul.  
Meyer, George J.  
McCombs, William P.  
Norris Machine Co. (General.)  
Pfeiffer, H. J.  
Pittsburgh Cornice and Roofing Co.  
Rasner & Dinger.  
Scholes Bros.  
Totten, W. R.  
Walker & Wilcox.  
Wilson Mfg. Co. (Specialties.)

**METERS, AIR.**  
Pittsburgh Meter Co.

**METERS, CENT HOUR.**  
Excess Indicator Co.

**METERS, ELECTRIC AMPERE ALTERNATING CURRENT.**  
Westinghouse Electric & Mfg. Co.

**METERS, ELECTRIC TESTING.**  
Westinghouse Electric & Mfg. Co.

**METERS, ELECTRIC WATT.**  
Westinghouse Electric & Mfg. Co.

**METERS, GAS.**  
Chaplan-Fulton Mfg. Co. (Rotary.)  
Equitable Meter Co. (All kinds and sizes.)  
Pittsburgh Meter Co.

**METERS, GAS, PROPORTIONAL.**  
Pittsburgh Meter Co.

**METERS, GAS TEST.**  
Equitable Meter Co.

**METERS, HYDRO.**  
Scientific Materials Co.

**METERS, OIL.**  
Pittsburgh Meter Co.

**METERS, THERMO.**  
Scientific Materials Co.

**METERS, WATER.**  
Pittsburgh Meter Co.

**MICA.**  
Westinghouse Electric & Mfg. Co.

**MICROMETERS, PARALLEL WIRE POSITION.**  
Brashear, John A. Co. (And special.)

**MILLS, BAR.**  
Mesta Machine Co.

**MILLS, BLOOMING.**  
Mackintosh-Hemphill & Co.  
Mesta Machine Co.  
United Engineering & Foundry Co.

**MILLS, CONTINUOUS.**  
United Engineering & Foundry Co.

**MILLS, GUIDE.**  
United Engineering & Foundry Co.

**MILLS, MUCK BAR.**  
United Engineering & Foundry Co.

**MILLS, ORE.**  
United Engineering & Foundry Co.

**MILLS, PLATE.**  
Mesta Machine Co.  
United Engineering & Foundry Co.

**MILLS, RAIL.**  
Mesta Machine Co.

**MILLS, ROLLING.**  
Garrison, A. Foundry Co. (Hot or cold.)  
Mackintosh-Hemphill & Co.

**MILLS, SHEET.**  
Mesta Machine Co.  
United Engineering & Foundry Co.

**MILLS, SKELP.**  
United Engineering & Foundry Co.

**MILLS, SLABBING.**  
Mesta Machine Co.  
United Engineering & Foundry Co.

**MILLS, STRUCTURAL.**  
Mesta Machine Co.  
United Engineering & Foundry Co.

**MILLS, TIN.**  
United Engineering & Foundry Co.

**MILLS, TIN PLATE.**  
Mesta Machine Co.

**MILLS, UNIVERSAL.**  
Mesta Machine Co.  
United Engineering & Foundry Co.

**MIRRORS.**  
American Mirror Works. (Toilet, framed.)  
Conroy-Prugh & Co. (Bath, toilet, shaving, triplicate, hot rack, mantel and parlor.)  
Gillespie, J. J. & Co. (Framed.)  
Liberty Mirror Works. (Toilet, bath and shock.)  
Pittsburgh Mirror Glass Co. (All kinds.)  
Pittsburgh Plate Glass Co. (Plane and beveled.)

**MINCE MEAT.**

Heinz, H. J. Co.  
Lutz & Schramm.

**MIXERS, CONCRETE.**

Carlin's, Thomas Sons Co. (Stationary.)  
Lawrenceville Machine Co.  
Standard Scale & Supply Co.

**MIXERS, GAS.**

Superior Mfg. Co. (Adjustable spud  
and air for.)  
Taylor-Burner Electroplating Co.

**MIXERS, METAL.**

Mesta Machine Co.  
Riter-Conley Mfg. Co.

**MIXERS, SAND, FOUNDRY.**

McCormack, J. S. Co.

**MODELS, EXPERIMENTAL, TO ORDER.**

Sommerfield Machine & Mfg. Co.

**MODELS, MACHINE.**

Austin Tool & Machine Co.

**MODELS, METAL.**

Beatty, J. M. Co.

**MODELS, PATENT.**

Csabina, E.

**MODELS, WOOD**

Beatty, J. M. Co.  
Pittsburgh Pattern Co.  
Reliance Pattern Works.  
South Pittsburgh Pattern Co.

**MOLASSES, MAPLE.**

Duff, P. & Sons.

**MONOGRAMS.**

Matthews, James H. Co. (Brass automobile.)  
Pannier Bros. Stamp Co. (All kinds.)

**MONUMENTAL WORK.**

Brandt, F. C.  
Campbell & Horrigan.  
Hollenburry, C. B.  
Kunkel, H. E.  
Monongahela Marble & Granite Co.  
Owens, B.  
Steadman, F. R.  
Stewart, James C.  
Wellman, Norris M.  
Whyte, James.  
Witalis, W. B.

**MOPS, COTTON.**

Flocker, John Co.  
Kolzen, A. H.  
Lang Broom Co.

**MOSAICS, LAMP.**

Semmer, Phillip Co.

**MOSAICS, PAINTING AND DECORATING.**

Willett Stained Glass & Decorating Co.

**MOSAICS, ROMAN AND VENETIAN, ARTISTIC.**

Patrizia Art Mosaic Co., The.

**MOTORS, AEROPLANE.**

Kowalsky Motor Co.

**MOTORS, AIR, COMPRESSED.**

Westinghouse Electric & Mfg. Co.

**MOTORS, ELECTRIC DRILLING.**

Gem Mfg. Co.

**MOTORS, ELECTRIC, OF ALL KINDS.**

Westinghouse Electric & Mfg. Co.

**MOTORS, MARINE.**

Kowalsky Motor Co.

**MOTORS, WATER.**

McDowell, J. G. & Co.  
Westinghouse Electric & Mfg. Co.

**MOULDINGS, ALUMINUM CARRIAGE BODY.**

Aluminum Co. of America.

**MOULDINGS, METAL.**

National Metal Moulding Co.

**MOULDINGS, WOOD.**

Commercial Sash & Door Co. (Carved  
and pressed.)  
Diebold Lumber & Mfg. Co.  
Dubarry & Co., G. D.  
Edgecomb, W. H. & Sons.  
Pittsburgh Hardwood Door Co.

**MOULDS, BABBITT METAL.**

Ajax Mfg. Co.

**MOULDS, CAKE, ENAMELED.**

Dunlap, John Co.

**MOULDS, GLASSHOUSE.**

Early, W. J. & Sons.  
Kelly, N. & Son.  
Metal Products Co.  
McKee, W. S.  
Rochester Mould & Machine Co.

**MOULDS, INGOT CASTING.**

Bollinger-Andrews Construction Co.  
Carnegie Steel Co.  
Hyde Park Foundry & Machine Co.  
Marshall Foundry Co.  
Union Foundry & Machine Co.

**MOULDS, MACHINE.**

Csabina, E.

**MOULDS, PIG.**

Coshocton Iron Co.

**MOULDS, STEEL.**

Coshocton Iron Co. (Crucible.)  
Rosedale Foundry & Machine Co.

**MOULDS, FOR STEEL MILLS.**

Gillespie Mfg. Co.

**MUCILAGE.**

Swearingen, J. C. Ink Co.

**MUFFLERS, AUTOMOBILE EXHAUST.**

Scaife, William B. & Sons Co.

**MUGS, BEER.**

Co-operative Flint Glass Co.  
Rochester Tumbler Works.  
United States Glass Co.

**MUGS, CANDY.**

Co-operative Flint Glass Co.

**MUSEUMS, ANATOMICAL.**

Becker & Kiesewetter. (For medical  
and surgical use.)

**MUSTARD.**  
Heinz, H. J. Co.  
Hirsch Bros. & Co.  
Lutz & Schramm.  
Tweed & Botsford.

**NAILS, BROOM.**  
Townsend, C. C. & E. P.

**NAILS, BRUSH.**  
Townsend, C. C. & E. P.

**NAILS, CIGAR BOX.**  
Townsend, C. C. & E. P.

**NAILS, COPPER.**  
Hussey, C. G. & Co.

**NAILS, COUNTERSUNK.**  
Townsend, C. C. & E. P.

**NAILS, CUT.**  
Republic Iron & Steel Co.  
Townsend, C. C. & E. P.

**NAILS, HINGE, WAGON.**  
Townsend, C. C. & E. P.

**NAILS, HORSE SHOE, ALL KINDS.**  
Standard Horse Nail Co.

**NAILS, IRON, CUT.**  
Republic Iron & Steel Co.  
Townsend, C. C. & E. P.

**NAILS, ROOFING.**  
Townsend, C. C. & E. P.

**NAILS, SHEATHING.**  
Townsend, C. C. & E. P.

**NAILS, STEEL, CUT.**  
Republic Iron & Steel Co.  
Townsend, C. C. & E. P.

**NAILS, TIE DATING.**  
Townsend, C. C. & E. P.

**NAILS, TIN.**  
Townsend, C. C. & E. P.

**NAILS, WIRE.**  
American Steel & Wire Co. (All kinds.)  
American Steel Co. (Coated.)  
Continental Steel & Supply Co. (Cement coated.)  
Jones & Laughlin Steel Co. (All kinds.)  
Page Woven Wire Fence Co.  
Pittsburgh Steel Company.  
Pittsburgh Valve Foundry & Construction Co.  
Townsend, C. C. & E. P.

**NAILS, WIRE, BARBED.**  
Townsend, C. C. & E. P.

**NAPHTHA.**  
Miller's, A. D. Sons Co.  
Pittsburgh Oil Refining Co.  
Waverly Oil Works.

**NAPPIES.**  
Rochester Tumbler Works.

**NEEDLES, MINERS'.**  
Hubbard & Co.  
Hardsocg, Martin Co.  
Klein-Logan Co.  
Pittsburgh Steel Mfg. Co.

**NETTING, WIRE POULTRY.**  
Pittsburgh Steel Co.  
Page Woven Wire Fence Co.

**NIPPLES, BRASS.**  
Acheson Mfg. Co.  
Kelly & Jones Mfg. Co., The.  
National Tube Co.  
Pittsburgh Nipple & Mfg. Co.

**NIPPLES, CASING.**  
Kelly & Jones Mfg. Co., The.

**NIPPLES, COPPER.**  
Pittsburgh Nipple & Mfg. Co. (Special.)

**NIPPLES, IRON.**  
Kelly & Jones Mfg. Co., The. (Wrought.)  
National Tube Co. (Wrought and malleable.)  
Pittsburgh Nipple & Mfg. Co. (Wrought.)

**NIPPLES, HOSE.**  
Standard Sanirtay Mfg. Co.

**NIPPLES, LOCK NUT.**  
Kelly & Jones Mfg. Co., The.

**NIPPLES, SOLDERING.**  
Kelly & Jones Mfg. Co., The.  
Standard Sanitary Mfg. Co.

**NIPPLES, STEEL.**  
Pittsburgh Nipple & Mfg. Co.  
Tillinghast, B. D.

**NIPPLES, STEEL, GALVANIZED.**  
Pittsburgh Nipple & Mfg. Co.

**NIPPLES, TANK.**  
Kelly & Jones Mfg. Co., The.  
National Tube Co.  
Pittsburgh Valve Foundry & Construction Co.

**NOSING, STAIR, BRASS OR BRONZE.**  
McKenna Bros. Brass Co.

**NOVELTIES, BRASS.**  
Fisher, A. J. & Co.

**NOVELTIES, GLASS.**  
Fidelity Glass Co.  
Jeannette Glass Co. (Pressed or blown flint.)

**NOVELTIES, GLASSWARE.**  
Co-operative Flint Glass Co.  
Consolidated Lamp & Glass Co. (Electric and gas light.)  
Duncan & Miller Glass Co.  
Phoenix Glass Co.  
Tarentum Glass Co.

**NOVELTIES, METAL.**  
Hipwell Mfg. Co. (Sheet.)  
McKenna Bros. Brass Co.

**NOVELTIES, PAPER, ADVERTISING.**  
Fuller, William H.

**NOZZLES, HOSE.**  
Kelly & Jones Mfg. Co., The.

**NOZZLES, OILER.**  
Gem Mfg. Co.

|   |  |
|---|--|
| <b>NOZZLES, PLUMBAGO LADLE.</b><br>McCullough-Dalzell Crucible Co.  | <b>NUTS, SLEEVE.</b><br>Republic Iron & Steel Co.  |
| <b>NOZZLES, STOVE, GAS.</b><br>Kelly & Jones Mfg. Co., The.   | <b>NUTS, SPECIAL.</b><br>Pittsburgh Block & Mfg. Co.   |
| <b>NUMBERS, METAL.</b><br>Matthews, James H. & Co.  | <b>NUTS, SQUARE.</b><br>Oliver Iron & Steel Co.  |
| <b>NUT LOCKS, F. B. C., ARCH BAR AND<br/>CONTINUOUS.</b><br>Keystone Nut Lock Co. (For freight<br>and passenger cars.)  | <b>NUTS, STOVE.</b><br>Republic Iron & Steel Co.   |
| <b>NUTS, BLANK.</b><br>Republic Iron & Steel Co.  | <b>NUTS, TAPPED.</b><br>Garland Nut & Rivet Co.<br>Graham Nut Co.<br>Lanz, M. & Son.<br>Oliver Iron & Steel Co.<br>Republic Iron & Steel Co. |
| <b>NUTS, CASE HARDENED.</b><br>Garland Nut & Rivet Co.<br>Graham Nut Co.<br>National Bolt & Nut Co.<br>Pittsburgh Screw & Bolt Co.  | <b>NUTS, THUMB.</b><br>Garland Nut & Rivet Co.<br>Republic Iron & Steel Co.  |
| <b>NUTS, CHECK.</b><br>Graham Nut Co.   | <b>NUTS, TIRE BOLT.</b><br>Republic Iron & Steel Co.   |
| <b>NUTS, COLD PUNCHED.</b><br>Fort Pitt Forge Co.<br>Garland Nut & Rivet Co.<br>Graham Nut Co.<br>National Bolt & Nut Co.<br>Neely Nut & Bolt Co.<br>Oliver Iron & Steel Co.<br>Pittsburgh Screw & Bolt Co.   | <b>NUTS, WING.</b><br>Oliver Iron & Steel Co.  |
| <b>NUTS, HEXAGON.</b><br>Neely Nut & Bolt Co.<br>Oliver Iron & Steel Co.<br>Republic Iron & Steel Co.<br>Lanz, M. & Son.  | <b>ODOMETERS, BELL, FOR MEASURING<br/>DISTANCE ON VEHICLES.</b><br>Roberts, J. D.  |
| <b>NUTS, HOT PRESSED.</b><br>Fort Pitt Forge Co.<br>Garland Nut & Rivet Co.<br>Graham Nut Co.<br>Lanz, M. & Son.<br>National Bolt & Nut Co.<br>Neely Bolt & Nut Co. (Square and<br>hexagon.)<br>Oliver Iron & Steel Co.<br>Pittsburgh Screw & Bolt Co.<br>Republic Iron & Steel Co. | <b>OFFSETS, BRASS.</b><br>Kelly & Jones Mfg. Co., The.   |
| <b>NUTS, JAM.</b><br>Graham Nut Co.   | <b>OFFSETS, DRAINAGE. (Cast and malle-<br/>able.)</b><br>Kelly & Jones Mfg. Co., The.  |
| <b>NUTS, JOINT.</b><br>Oliver Iron & Steel Co.<br>Republic Iron & Steel Co.   | <b>OILERS, BRASS.</b><br>Gem Mfg. Co.  |
| <b>NUTS, JOIST.</b><br>Oliver Iron & Steel Co.  | <b>OILERS, CAR.</b><br>Gem Mfg. Co.<br>McClintock & Irvine.  |
| <b>NUTS, LARGE FORGED.</b><br>Fort Pitt Forge Co.<br>National Bolt & Nut Co.  | <b>OILERS, ENGINE.</b><br>McClintock & Irvine.   |
| <b>NUTS, LOCK.</b><br>National Tube Co. (Cast and malle-<br>able.)<br>Steel City Electric Co. (Electric con-<br>duit.)<br>Verona Tool Works.  | <b>OILERS, LOOSE.</b><br>Gem Mfg. Co.  |
| <b>NUTS, SEMI-FINISHED.</b><br>Fort Pitt Forge Co.<br>Garland Nut & Rivet Co.<br>Graham Nut Co.<br>Pittsburgh Screw & Bolt Co.  | <b>OILERS, MACHINE.</b><br>Gem Mfg. Co.<br>Sands Mfg. Co. (Steel brazed.)<br>Wall, P. Mfg. & Supply Co. (Steel<br>brazed.)                   |
|   | <b>OILERS, MINE.</b><br>McClintock & Irvine.   |
|   | <b>OILERS, MINERS'.</b><br>Grier Bros., Ltd.   |
|   | <b>OILERS, NICKELED.</b><br>Gem Mfg. Co.   |
|   | <b>OILERS, PIT.</b><br>Gem Mfg. Co.<br>McClintock & Irvine.<br>Wall, P. Mfg. & Supply Co.  |
|   | <b>OILERS, PLAIN.</b><br>Gem Mfg. Co.  |
|   | <b>OILERS, POLISHED.</b><br>Gem Mfg. Co.   |

**OILERS, PULLEY.**

Gem Mfg. Co.

**OILERS, STEEL BRAZED.**

Gem Mfg. Co.

McClintock &amp; Irvine.

Sands Mfg. Co.

Wall, P. Mfg. &amp; Supply Co.

**OILS, ASPHALTUM.**

Gulf Refining Co.

**OILS, AUTOMOBILE.**

Duquesne Oil &amp; Supply Co.

Eagle Lubricating Oil Co.

Freedom Oil Works.

Miller, A. D. Sons Co.

Pennsylvania Lubricating Co.

Petroleum Products Co.

**OILS, BURNING, OF VARIOUS GRAVITIES.**

Pittsburgh Oil Refining Co.

**OILS, CYLINDER.**

Duquesne Oil &amp; Supply Co.

Freedom Oil Works.

Miller, A. D. Sons Co.

Marine Oil Co.

Pennsylvania Lubricating Co.

Petroleum Products Co.

Pittsburgh Oil Refining Co.

Robinson Bros.

**OILS, ENGINE.**

Duquesne Oil &amp; Supply Co.

Freedom Oil Works.

Marine Oil Co.

Miller, A. D. Sons Co.

Robinson Bros.

**OILS, FUEL.**

Freedom Oil Works.

Gulf Refining Co.

Robinson Bros.

**OILS, GAS.**

Gulf Refining Co.

**OILS, HARNESS.**

Miller, A. D. Sons Co.

**OILS, HORSE.**

American Reduction Co.

**OILS, HOUSEHOLD.**

Marine Oil Co. (For cleaning and polishing.)

**OILS, ILLUMINATING.**

Brilliant Light &amp; Oil Co.

Crescent Oil Co.

Gulf Refining Co.

Guffy, J. M. Petroleum Co.

Waverly Oil Works.

Robinson Bros.

**OILS, INSULATING.**

Westinghouse Electric &amp; Mfg. Co.

**OILS, KEROSENE.**

Brilliant Light &amp; Oil Co.

Guffy, J. M. Petroleum Co.

Gulf Refining Co.

Miller, A. D. Sons Co.

**OILS, LACQUER.**

Suydam, M. B. Co.

**OILS, LINSEED.**

National Lead &amp; Oil Co.

Thompson &amp; Co.

**OILS, LUBRICATING.**

Eagle Lubricating Oil Co.

Franklin Refining Co.

Freedom Oil Works.

Gulf Refining Co.

Marine Oil Co.

Miller, A. D. Sons Co.

McClintock &amp; Irvine.

Pennsylvania Lubricating Co.

Petroleum Products Co.

Robinson Bros.

Waverly Oil Works.

**OILS, MACHINERY.**

Freedom Oil Works.

Marine Oil Co.

Robinson Bros.

**OILS, OLEO.**

Pittsburgh Provision &amp; Packing Co.

**OILS, OLIVE.**

Heinz, H. J. Co.

**OILS, PAINT.**

Atlas Paint Co.

Brazilian Turpentine Co.

Ball Chemical Co.

Fort Pitt Oil &amp; Paint Co.

Sipe, James B. &amp; Co.

**OILS, ROAD.**

Freedom Oil Works.

**OILS, SALAD.**

Chamberlain &amp; Johnson.

Tweed &amp; Botsford.

**OILS, TRANSFORMER.**

Miller, A. D. Sons Co.

**OLIVES.**

Heinz, H. J. Co.

Lutz &amp; Schram.

**OPTICAL GOODS AND SUPPLIES.**

Brashear, John A. Co.

Pierce, Rodney Optical Co.

**ORES, "BLUE BILLY," 68% METALLIC IRON FREE FROM PHOSPHORUS.**

Pennsylvania Salt Mfg. Co.

**ORES, CHROME.**

Harbison-Walker Refactories Co.

**ORES, VANADIUM.**

American Vanadium Co.

**OVENS, ANNEALING.**

Vitro Mfg. Co.

**OVENS, BAKE.**

Albrecht, Francis J.

Adler, H. Co.

Reese, D. W.

Wilson Mfg. Co.

**OVENS, COKE.**

Coal &amp; Coke By-Products Co.

**OVENS, CORE.**

McCormack, J. S. Co.

Vitro Mfg. Co.

**OVENS, ENAMELING.**

Vitro Mfg. Co.

**OVERALLS.**

Arbuthnot-Stephenson Co.

Becker Bros.

Ferguson, H. B.

Ferguson &amp; Hene.

Hannach Bros.

Patent Garment &amp; Mfg. Co.

Pittsburgh Dry Goods Co.

Ravich &amp; Fishkin.

**OXIDES, PAINT.**

Pittsburgh Iron Paint Co.

**PACKERS, ARTESIAN WELL.**

Maseth Packer &amp; Supply Co.

**PACKERS, GAS WELL.**

Heeters, C. M. &amp; Sons Co.

Maseth Packer &amp; Supply Co.

**PACKERS, MEAT.**

Pittsburgh Provision &amp; Packing Co.

Dunlevy Bros.

Seiler, John Co.

**PACKERS, OIL WELL.**

Heeter's, C. M. Sons.

Maseth Packer &amp; Machine Co.

Pennsylvania Rubber Co.

**PACKING, AIR.**

Pittsburgh Steam Packing Co.

**PACKING, AIR PUMP (LOCOMOTIVE).**

Universal Flexible Packing Co.

**PACKING, AMMONIA.**

Pittsburgh Steam Packing Co.

**PACKING, ASBESTOS.**

Pittsburgh Steam Packing Co.

**PACKING, COTTON.**

Pittsburgh Steam Packing Co.

**PACKING, FLAX.**

Pittsburgh Steam Packing Co.

**PACKING, GUM.**

Pittsburgh Steam Packing Co.

**PACKING, HEMP.**

McClintock &amp; Irvine.

Pittsburgh Steam Packing Co.

**PACKING, HYDRAULIC.**

Pittsburgh Steam Packing Co.

**PACKING, JUTE.**

McClintock &amp; Irvine.

**PACKING, LEATHER.**

Pittsburgh Steam Packing Co.

**PACKING, LOCOMOTIVE AIR PUMP.**

Universal Flexible Packing Co.

**PACKING, METALLIC.**

Pittsburgh Steam Packing Co.

**PACKING, PISTON ROD.**

Pittsburgh Steam Packing Co.

**PACKING, PLUMBAGO.**

Pittsburgh Steam Packing Co.

**PACKING, PUMP.**

Pittsburgh Steam Packing Co.

Universal Flexible Packing Co. (Loco-  
motive air.)**PACKING, RADIATOR.**

Pittsburgh Steam Packing Co.

**PACKING, RAWHIDE.**

Pittsburgh Steam Packing Co.

**PACKING, RING.**

Pennsylvania Rubber Co.

Pittsburgh Steam Packing Co.

**PACKING, RUBBER.**

Pennsylvania Rubber Co. (Red sheet.)

Pittsburgh Steam Packing Co. (Sheet.)

**PACKING, SOAPSTONE.**

Pittsburgh Steam Packing Co.

**PACKING, STEAM.**

Chaplan-Fulton Mfg. Co.

McClintock &amp; Irvine.

Pittsburgh Rubber &amp; Leather Co.

Pittsburgh Steam Packing Co.

Turner, C. A., Inc.

**PADS, CLEANING, FOR METAL AND  
FURNITURE POLISHING.**Pittsburgh Cleaning and Polishing Pad  
Co.**PADS, HORSESHOE, RUBBER.**

Pennsylvania Rubber Co.

**PADS, INK.**

Hagar, C. C. Co. ("Never Smear.")

**PADS, WRITING.**

Johnston, Wm. G. &amp; Co.

**PAILS, CEMENT, ENAMELED.**

Dunlap, John Co.

**PAILS, CHAMBER.**

Dunlap, John Co.

**PAILS, DAIRY.**

Dunlap, John Co.

**PAILS, DINNER, OVAL, ROUND AND  
OBLONG.**

Pittsburgh Tinware Mfg. Co.

**PAILS, FIRE.**

Dunlap, John Co.

**PAILS, GALVANIZED IRON.**

Pittsburgh Tinware Mfg. Co. (Water.)

Wall, P. Mfg. &amp; Supply Co.

**PAILS, GARBAGE.**

Dunlap, John Co.

**PAILS, TIN PUTTY.**

Enterprise Stamping Co.

**PAILS, WATER.**

Dunlap, John Co.

Pittsburgh Tinware Mfg. Co. (Gal-  
vanized iron.)**PAINTS, ACID PROOF.**

Atlas Paint Co.

Suydam, M. B. Co.

**PAINTS, ALUMINUM.**

Aluminum Co. of America.  
Hommel, O. Co.

**PAINTS, ASBESTOS.**

Nevin, T. H. Co.

**PAINTS, ASPHALT.**

Eagle Paint & Varnish Co.  
Fort Pitt Oil & Paint Co.  
McClintock & Irvine.  
Suydam, M. B. & Co.  
Thompson & Co.

**PAINTS, BARN.**

Painter, Joel T. Co.

**PAINTS, BARREL.**

Atlas Paint Co.

**PAINTS, BOILER.**

Robinson Oil Co.

**PAINTS, BRICK.**

Nevin, T. H. Co.

**PAINTS, CAR.**

Nevin, T. H. Co.

**PAINTS, CARBON.**

Nevin, T. H. Co.

**PAINTS, CARRIAGE.**

Eagle Paint & Varnish Co.

**PAINTS, COLD WATER.**

Atlas Paint Co.

**PAINTS, COPPER.**

Atlas Paint Co.

**PAINTS, DIPPING.**

Atlas Paint Co.  
McClintock & Irvine.  
Nevin, T. H. Co.

**PAINTS, DUST ABSORBENT.**

Robinson Oil Co., The.

**PAINTS, ELASTIC BLACK.**

Barrett Mfg. Co. (For iron, wood and  
prepared roofings.)

**PAINTS, ENAMEL.**

Atlas Paint Co.  
Eagle Paint & Varnish Co.  
Lawrence, W. W. Co.

**PAINTS, FACTORY.**

Atlas Paint Co.

**PAINTS, FIREPROOF.**

Atlas Paint Co.  
Fort Pitt Oil & Paint Co.  
Suydam, M. B. Co.

**PAINTS, FLOOR.**

Eagle Paint & Varnish Co.  
Painter, Joel T. Co.

**PAINTS, FUMELESS.**

Atlas Paint Co.

**PAINTS, GLOSS.**

Wheeler, Henry & Son. (All colors.)

**PAINTS, GOLD.**

Hommel, O. Co.

**PAINTS, GRAPHITE.**

Fort Pitt Oil & Paint Co.  
Lawrence, W. W. Co.  
Nevin, T. H. Co.  
Suydam, M. B. Co.

**PAINTS, HOUSE.**

Atlas Paint Co.

**PAINTS, INSULATING.**

Suydam, M. B. Co.  
Fort Pitt Oil & Paint Co.

**PAINTS, IRON.**

Barrett Mfg. Co.  
Fort Pitt Oil & Paint Co.  
Lawrence, W. W. Co.  
Nevin, T. H. Co.  
McClintock & Irvine.

**PAINTS, LOCOMOTIVE.**

Nevin, T. H. Co.

**PAINTS, MACHINERY.**

Atlas Paint Co.  
Suydam, M. B. Co.

**PAINTS, MARINE.**

Atlas Paint Co.  
Nevin, T. H. Co.

**PAINTS, METALLIC.**

Eagle Paint & Varnish Co.

**PAINTS, MINERAL.**

Pittsburgh Iron & Paint Co.

**PAINTS, MISCELLANEOUS.**

Globe Varnish Co.  
Heath & Milligan. (Color.)  
Regal Paint & Oil Co.

**PAINTS, OIL.**

Crescent Oil Co.  
Nevin, T. H. Co.  
Painter, Joel T. Co.

**PAINTS, PASTE.**

Atlas Paint Co.

**PAINTS, OXIDE OF IRON.**

McClintock & Irvine.  
Suydam, M. B. Co.

**PAINTS, READY MIXED.**

Eagle Paint & Varnish Co.  
Lawrence, W. W. Co.  
Nevin, T. H. Co.  
Painter, Joel T. Co.  
Sipe, James B. & Co.

**PAINTS, RED, OUTSIDE.**

American Cold Japan Co.

**PAINTS, ROOF.**

Atlas Paint Co.  
Barrett Mfg. Co. (Coating for pre-  
pared roofings.)  
Fort Pitt Oil & Paint Co.  
McClintock & Irvine.

**PAINTS, ROUGH.**

American Cold Japan Co.

**PAINTS, RUST PROOF.**

Fort Pitt Oil & Paint Co.  
McClintock & Irvine.  
Suydam, M. B. Co.

**PAINTS, SHOP.**

Atlas Paint Co.

**PAINTS, SPECIAL.**

Lawrence, W. W. Co.  
Painter, Joel T. Co.  
Thompson & Co.

**PAINTS, STEEL.**

Fort Pitt Oil & Paint Co.  
Lawrence, W. W. Co.  
McClintock & Irvine.  
Nevin, T. H. Co.  
Suydam, M. B. Co.  
Thompson & Co.

**PAINTS, STRUCTURAL.**

Atlas Paint Co.  
Lawrence, W. W. Co.  
Puritan Paint & Oil Co.  
Robinson Oil Co., The.

**PAINTS, WAGON.**

Atlas Paint Co.  
Eagle Paint & Varnish Co.  
Painter, Joel T. Co.

**PAINTS, WATERPROOF.**

Atlas Paint Co.  
Fort Pitt Oil & Paint Co.

**PANELS, ELECTRIC AUTOMATIC CHARGING.**

Westinghouse Electric & Mfg. Co.

**PANELS, ELECTRIC PLUG SWITCH.**

Westinghouse Electric & Mfg. Co.

**PANELS, IRON BAS-RELIEF.**

Tyler, W. S. Co., The.

**PANELS, WOOD.**

Wilkinsburg Stair & Mfg. Co.

**PANS, BAKE.**

Dunlap, John Co. (Enameled round  
and oblong.)  
Budke Stamping Co.

**PANS, BREAD.**

Beaver Mfg. Co.

**PANS, CHARGING.**

Scaife, William B. & Sons Co.

**PANS, CROCKERY.**

Elverson, W. H. Pottery Co. (For  
flowers and seeds.)

**PANS, DISH.**

Dunlap, John Co.

**PANS, DRIPPING.**

Beaver Mfg. Co.  
Keystone Sheet Metal Co.

**PANS, DRYING.**

Treadwell Construction Co.

**PANS, FRYING.**

Dunlap, John Co.

**PANS, FURNACE.**

Riter-Conley Mfg. Co.

**PANS, GALVANIZING.**

Treadwell Construction Co.

**PANS, GRINDING.**

Carlin's, Thomas Sons Co. (Wet and  
dry clay and sand.)  
Lewis Foundry & Machine Co. (Ore,  
clay and sand.)  
Phillips & McLaren. (Wet and dry.)  
Scaife, William B. & Sons Co. (Clay.)  
Sterrett-Thomas Foundry Co.

**PANS, MILK.**

Dunlap, John Co.

**PANS, MIXING.**

Carlin's, Thomas Sons Co.  
Dunlap, John Co. (Household.)  
Garrison, A. Foundry Co.  
Scaife, William B. & Sons Co.

**PANS, ORE.**

Garrison, A. Foundry Co.  
Lewis Foundry & Machine Co.  
Scaife, William B. Sons & Co.

**PANS, PUDDING.**

Dunlap, John Co.

**PANS, REFRIGERATOR.**

Dunlap, John Co.

**PANS, ROASTING.**

Budke Stamping Co.

**PANS, SAUCE.**

Dunlap, John Co.

**PANS, STEW.**

Dunlap, John Co.

**PAPER, PRINT, BLUE AND BROWN.**

Elliott, B. K. Co.

**PAPER, ROPE.**

Tarentum Paper Mills.

**PAPER, SACK.**

Tarentum Paper Mills.

**PAPER, TAR ROOFING.**

Young, J. F. Co.

**PAPER, WALL.**

Asdale Wall Paper Co.  
Pittsburgh Wall Paper Co.

**PAPER, WRAPPING.**

Tarentum Paper Mills.  
Union Paper Mills Co.

**PAPERS, ELECTRIC INSULATING.**

Pittsburgh Insulating Co.

**PARERS, VEGETABLE.**

Gioekler, Bernard Co.

**PARTITIONS, OFFICE AND STORE, WOOD.**

Diebold Lumber Co.

**PASTE, ANTI-RUST.**

Fort Pitt Oil & Paint Co.  
Sipe, James B. & Co.

**PASTE, DRY.**

Fuller, A. M.

**PASTE, FLOUR, WET.**

Fuller, A. M.

**PASTE, LIBRARY.**

Swearingen, J. C. Ink Co.

**PASTE, METAL.**

Becker Chemical Co.

**PASTE, OFFICE.**

Swearingen, J. C. Ink Co.

**PASTE, SOLDERING, OAKWOOD.**

Weaver Specialty Co.

**PATTERNS, FOUNDRY.**

Coshocton Iron Co.

**PATTERNS, METAL.**

Beatty, J. M. Co.

Bond, Charles A.

Carron, A. M. Co.

Eclipse Pattern Co.

Excelsior Pattern Co.

Fitzpatrick, J. G. Mfg. Co.

Frank Pattern Co.

Standard Pattern Co.

**PATTERNS, WOOD.**

Beatty, J. M. Co.

Excelsior Pattern Co.

Fischer Foundry Co.

Fitzpatrick, J. G. Mfg. Co.

Gardner Gas Engine Co., The.

Munro, Peter C.

Pittsburgh Pattern Co.

South Pittsburgh Pattern Co.

Standard Pattern Co.

**PEDESTALS, ALL KINDS, FOR STORES.**

McLean, W. B. Mfg. Co.

**PELTS, SHEEP.**

Pennsylvania Hide &amp; Leather Co.

**PENCILS, LETTERING.**

Wolfe Brush Co.

**PENCILS, STRIPING.**

Wolfe Brush Co.

**PENSTOCKS.**

Carroll-Porter Boiler &amp; Tank Co.

Riter-Conley Mfg. Co. (Turbine wheel.)

Scafe, William B. &amp; Sons Co.

Treadwell Construction Co.

**PEPSIN, WILD CHERRY.**

Hollander Bros. Drug Co.

**PETROLEUM.**

Freedom Oil Works. (Refiners of.)

Guffey, J. M. Petroleum Co.

Gulf Refining Co.

Pittsburgh Oil Refining Co.

Robinson Oil Co., The.

**PEWS, CHURCH.**

Kittanning Church Seating Co.

**PHARMACEUTICALS.**

Pittsburgh Physicians Supply Co.

**PHOSPHORIZERS.**

McCullough-Dalzell Crucible Co.

**PIANOS.**

Kleber, H. &amp; Bro. (All kinds.)

**PICKETS, STEEL FENCE.**

Oliver Iron &amp; Steel Co.

**PICKETS, WOOD.**

Commercial Sash &amp; Door Co.

**PICKLE PRODUCTS.**

Cole, E. P.

Cruikshank Bros. Co.

Heinz, H. J. Co.

Lutz &amp; Schramm.

**PICKS, ASPHALT CUTTER.**

Oliver Iron &amp; Steel Co.

**PICKS, BOILER.**

Hubbard &amp; Co.

Iron City Tool Works.

**PICKS, CLAY.**

Hubbard &amp; Co.

Iron City Tool Works.

Klein-Logan Co.

Oliver Iron &amp; Steel Co.

Western Tool &amp; Forge Co.

**PICKS, COAL.**

Hubbard &amp; Co.

Iron City Tool Works.

Klein-Logan Co.

Oliver Iron &amp; Steel Co.

**PICKS, CONCRETE.**

Hubbard &amp; Co.

Iron City Tool Works.

Klein-Logan Co.

**PICKS, CONTRACTORS.**

American Axe &amp; Tool Co.

Hubbard &amp; Co.

Iron City Tool Works.

Klein-Logan Co.

Oliver Iron &amp; Steel Co.

**PICKS, CUPOLA.**

Iron City Tool Works.

**PICKS, DRIFTING.**

Hardsocg, Martin Co.

Hubbard &amp; Co.

Iron City Tool Works.

Klein-Logan Co.

Oliver Iron &amp; Steel Co.

**PICKS, LEAD.**

Iron City Tool Works.

Klein-Logan Co.

**PICKS, MACHINE.**

Iron City Tool Works.

**PICKS, MILL.**

Hubbard &amp; Co.

Iron City Tool Works.

**PICKS, MINING.**

American Axe &amp; Tool Co.

Gerber, Louis &amp; Son.

Hardsocg, Martin Co.

Hubbard &amp; Co.

Pittsburgh Steel Mfg. Co.

Verona Tool Works.

**PICKS, ORE.**

Hubbard &amp; Co.

Iron City Tool Works.

Klein-Logan Co.

Oliver Iron &amp; Steel Co.

**PICKS, POLL.**

Hubbard &amp; Co.

Iron City Tool Works.

Klein-Logan Co.

Oliver Iron &amp; Steel Co.

**PICKS, PROSPECTING.**

Hubbard & Co.  
Iron City Tool Works.

**PICKS, PUNCHER.**

Oliver Iron & Steel Co.  
Pittsburgh Trolley & Forge Co.  
Turner, C. A., Inc. (For mining machines.)  
Valley Forging Co. (Coal.)

**PICKS, QUARRY.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.

**PICKS, RAILROAD.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.  
Verona Tool Works.

**PICKS, ROCK.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.

**PICKS, STONE.**

Buechel & Davis.  
Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.

**PICKS, SURFACE.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.

**PICKS, TAMPING.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.  
Verona Tool Works.

**PICKS, TIE, RAILROAD.**

Iron City Tool Works.

**PICKS, ZINC.**

Hubbard & Co.  
Klein-Logan Co.

**PIERS, IRON AND STEEL.**

McClintic-Marshall Construction Co.  
Penn Bridge Co.

**PILES, CONCRETE REINFORCING.**

Electric Welding Co.

**PILES, STEEL.**

Carnegie Steel Co.  
Pittsburgh Steel Co.

**PILLOWS.**

Diamond Mattress Co.  
Fort Pitt Bedding Co.  
Gross, H. E. & Co.  
Logan, A. J. Co.

**PINIONS, ELECTRIC RAILWAY.**

Nuttal, R. D. Co.

**PINIONS, MILL.**

Fawcett Machine Co. (Cut.)  
Garrison, A. Foundry Co. (Combination.)  
Mesta Machine Co.  
McClintic-Marshall Construction Co.  
Pittsburgh Steel Foundry Co. (Steel.)  
Seaman-Sleeth Co. (Iron and steel roll.)

**PINIONS, STEEL.**

Garrison, A. Foundry Co.  
Pittsburgh Steel Foundry Co.

**PINS, AIR BRAKE.**

Etna Forge & Bolt Co.  
Oliver Iron & Steel Co.  
Western Tool & Forge Co.

**PINS, ASPHALTED.**

National Tube Co.

**PINS, BOWLING.**

Wutherele, George & Son.

**PINS, CAR COUPLER.**

Carnegie Steel Co.  
Jones & Laughlin Steel Co.  
Oliver Iron & Steel Co.  
Pittsburgh Forge & Iron Co.  
Pittsburgh Steel Co.  
Standard Chain Co.

**PINS, DOWEL.**

Pittsburgh Steel Co.

**PINS, DRIFT.**

Oliver Iron & Steel Co.  
Pittsburgh Block & Mfg. Co.  
Pittsburgh Trolley & Forge Co.  
Turner, C. A., Inc.

**PINS, INSULATOR.**

Oliver Iron & Steel Co.  
Turner, C. A., Inc.

**PINS, KNUCKLE.**

Etna Forge & Bolt Co.  
Oliver Iron & Steel Co.  
Western Tool & Forge Co.

**PINS, PICKET, STRAIGHT AND SPIRAL.**

Oliver Iron & Steel Co.

**PINS, POLE.**

Diamond Forging & Mfg. Co. (Wagon or truck.)  
Oliver Iron & Steel Co. (Iron telephone.)

**PINS, STEEL CRANK.**

Braeburn Steel Co.  
Carbon Steel Co.  
Carnegie Steel Co.  
Crucible Steel Co.  
Jones & Laughlin Steel Co.  
Pittsburgh Steel Co.

**PINS, TRUCK BINDER.**

Diamond Forging & Mfg. Co.

**PIPE, BLACK.**

Byers, A. M. Co.  
Central Tube Co.  
National Tube Co.  
Spang-Chalfant Co.

**PIPE, BLAST SUCTION.**

Pittsburgh Cornice & Roofing Co.  
Standard Sheet Metal Mfg. Co.

**PIPE, BLOCK TIN.**  
National Lead & Oil Co.

**PIPE, BRASS.**  
Pittsburgh Brass Mfg. Co.

**PIPE, CAST IRON.**  
American Foundry & Pipe Co.  
Pittsburgh Valve Foundry & Construction Co.

**PIPE, CONDUCTOR.**  
Central Tube Co. (Armored.)  
Hussey, C. G. & Co. (Copper.)  
Irwin, James.

**PIPE, CONDUIT.**  
Central Tube Co. (Rigid iron.)

**PIPE, COPPER.**  
Hussey, C. G. & Co. (Conductor.)  
Stender Coppersmith Co., The. (Steam.)

**PIPE, CULVERT.**  
American Sewer Pipe Co.

**PIPE, DRIVE.**  
Byers, A. M. Co. (Line.)  
National Supply Co. (Well.)  
National Tube Co. (Well.)  
Reliance Tube Co. (Well.)  
Spang-Chalfant Co. (Line.)

**PIPE, FLANGED.**  
Kelly & Jones Mfg. Co., The.  
Pittsburgh Valve Foundry & Construction Co.  
Taylor-Wilson Mfg. Co.

**PIPE, FURNACE.**  
Rome, George & Co.

**PIPE, GALVANIZED.**  
Central Tube Co.  
Sciaife, William B. & Sons Co.

**PIPE, GLASSBLOWERS'.**  
Leng, Charles.  
Sommerfield Machine & Mfg. Co.

**PIPE, HYDRAULIC.**  
Best, Mfg. Co.  
Pittsburgh Steel Construction Co.  
Pittsburgh Valve Foundry & Construction Co.

**PIPE, LEAD.**  
National Lead & Oil Co.

**PIPE, OIL WELL LINE, WROUGHT IRON.**  
Crescent Pipe Line Co.  
Monongahela Tube Co.

**PIPE, RECTANGULAR.**  
National Tube Co.

**PIPE, RIVETED.**  
Carroll-Porter Boiler & Tank Co.  
(Iron.)  
Lappan, James Mfg. Co. (Straight iron.)  
Long, Walter Mfg. Co.  
McNeil, James & Bro. Co. (Iron.)  
Pittsburgh Steel Construction Co.  
(Steel.)  
Pittsburgh Valve Foundry & Construction Co. (Iron.)  
Riter-Conley Mfg. Co. (Iron.)  
Sciaife, William B. & Sons Co. (Iron.)  
Treadwell Construction Co. (Steel.)

**PIPE, SEWER.**  
Concrete Products Co. (Concrete.)  
National Fireproofing Co.  
Union Sewer Pipe Co.

**PIPE, SHEET METAL.**  
McCombs, William P. Co.  
Pearson Mfg. Co. (Iron.)  
Papencordt, Walter.

**PIPE, SOIL, CAST IRON.**  
American Foundry & Pipe Co.  
McVay & Walker.

**PIPE, SQUARE.**  
National Tube Co.

**PIPE, STAND.**  
Carroll-Porter Boiler & Tank Co.  
Munroe, R. & Sons Co.  
McNeil, James & Bro.  
Riter-Conley Mfg. Co.  
Treadwell Construction Co.

**PIPE, STEEL.**  
Central Tube Co. (Extra heavy.)  
National Tube Co.  
Pittsburgh Steel Construction Co.  
Spang-Chalfant Co.  
Treadwell Construction Co.

**PIPE, STOVE.**  
Budke Stamping Co. (Pieced and corrugated.)  
Pittsburgh Iron Folding Bed Co.  
Schaffer, A. F.

**PIPE, SUPPLY.**  
Standard Sanitary Mfg. Co.

**PIPE, TUYERE.**  
National Tube Co.

**PIPE, VENT.**  
Papencordt, Walter.

**PIPE, VENTILATING.**  
Pittsburgh Cornice & Roofing Co.  
Standard Sheet Metal Mfg. Co.

**PIPE, VITRIFIED.**  
American Sewer Pipe Co.

**PIPE, WOOD, WATER AND ACID.**  
Childs, H. L. & Son.

**PIPE, WROUGHT.**  
Byers, A. M. Co.  
Central Tube Co.  
Childs, H. L. & Son.  
Monongahela Tube Co.  
Moorehead Bros. & Co.  
National Tube Co.  
Pittsburgh Tube Co.  
Riter-Conley Mfg. Co.  
Spang-Chalfant Co.

**PIPES, SMOKING.**  
Fischer & Mellish.

**PIPING, HIGH PRESSURE.**  
Anderson Darragh Co.  
Best Mfg. Co.  
Pittsburgh Gage & Supply Co.  
(Steam.)  
Pittsburgh Piping & Equipment Co.  
Pittsburgh Valve Foundry & Construction Co.

**PIPING, HYDRAULIC.**  
Best Mfg. Co.

**PIPING, POWER HOUSE.**

Best Mfg. Co.

**PISTOLS, TOY OR PAPER CAP.**

Pittsburgh Cap Pistol Co.

**PISTONS.**

Carnegie Steel Co.

**PITCH, PAVING.**

McClintock &amp; Irvine.

**PITCH, ROOFING.**

McClintock &amp; Irvine.

**PITCHERS, ENAMELED ICE WATER.**

Dunlap, John Co.

**PITS, SOAKING.**

Vitro Mfg. Co.

**PLASTER, DRY PATENT WALL.**

Crown Wall Plaster Co.

**PLASTER, FIBRE.**

New Kensington Fibre Plaster Co.

**PLASTER, WOOD FIBRE.**Ally, Co. Wood Fibre Plaster Co.  
(Hard.)

New Kensington Fibre Plaster Co.

**PLATE, BLACK.**McKeesport Tin Plate Co.  
Standard Tin Plate Co.**PLATE, TERNE.**

Standard Tin Plate Co.

**PLATE, TIN.**American Sheet & Tin Plate Co.  
McKeesport Tin Plate Co.  
Standard Tin Plate Co.**PLATES, ALUMINUM.**

Aluminum Co. of America.

**PLATES, ANCHOR.**

Turner, C. A., Inc.

**PLATES, ARMOR, STEEL AND NICKEL STEEL.**American Vanadium Co.  
Carnegie Steel Co.  
Pittsburgh Steel Co.**PLATES, BOILER, STEEL.**Carbon Steel Co.  
Carnegie Steel Co.  
Crucible Steel Co.  
Jones & Laughlin Steel Co.  
Oliver Iron & Steel Co.  
Pittsburgh Steel Co.**PLATES, BOLSTER.**Oliver Iron & Steel Co. (Iron.)  
Republic Iron & Steel Co. (Car.)**PLATES, BOSH.**Best Mfg. Co. (Furnace.)  
Keystone Bronze Co.

Lawrenceville Bronze Co.

**PLATES, BRIDGE.**American Bridge Co. (Steel.)  
Carbon Steel Co.  
Carnegie Steel Co.  
Crucible Steel Co.  
Jones & Laughlin Steel Co.  
Pittsburgh Steel Co.**PLATES, CAR.**Carnegie Steel Co.  
Pressed Steel Car Co.  
Standard Motor Truck Co. (Door.)**PLATES, CEILING.**Booth, J. B. & Co.  
Carnegie Steel Co.  
Dilworth, Porter & Co.  
Kelly & Jones Mfg. Co., The.  
National Tube Co.  
Pittsburgh Lamp, Brass & Glass Co.  
Reliance Heater & Supply Co.**PLATES, CIRCULAR SAW, STEEL.**

Colonial Steel Co.

**PLATES, DINNER, ENAMELED.**

Dunlap, John Co.

**PLATES, DOOR.**McKenna Bros. Brass Co. (Kick and  
push.)  
Pittsburgh Brass Mfg. Co. (Kick and  
push.)  
Pressed Steel Car Co. (Car.)  
Standard Motor Truck Co. (Car.)**PLATES, ENAMELED, NAME.**

Ingram-Richardson Mfg. Co.

**PLATES, ENAMELED, PIE AND DINNER.**

Dunlap, John Co.

**PLATES, ETCHING, STEEL.**

Lippert, E. T. Saw Co.

**PLATES, EXPANSION.**Kelly & Jones Mfg. Co., The.  
National Tube Co.**PLATES, FELLOE.**

McKinney Mfg. Co.

**PLATES, FIRE BOX.**Carbon Steel Co. (Acid steel locomotive.)  
Colonial Steel Co. (Steel.)**PLATES, FISH.**

Republic Iron &amp; Steel Co.

**PLATES, FIVE PLY FOR SAFES AND VAULTS.**

Carbon Steel Co.

**PLATES, FLANGE.**

Carbon Steel Co.

**PLATES, FLOOR.**Carnegie Steel Co.  
Kelly & Jones Mfg. Co., The.  
National Tube Co.  
Pittsburgh Lamp, Brass & Glass Co.  
Reliance Heater & Supply Co.**PLATES, FOLLOWER.**

Pittsburgh Forge &amp; Iron Co.

**PLATES, GRINDING, FOR GLASS MANUFACTURERS.**

Kelly, N. &amp; Son.

**PLATES, HARD CENTER.**

Carbon Steel Co.

**PLATES, HOOK AND PIPE.**Kelly & Jones Mfg. Co., The.  
National Tube Co.  
Oil Well Supply Co.

**PLATES, INCLINE.**

Milholland, J. & J. B. Co.  
Scaife Foundry & Machine Co.

**PLATES, IRON.**

Booth, J. B. & Co.  
Jones & Laughlin Steel Co.  
Long, Walter Mfg. Co.  
Oliver Iron & Steel Co.

**PLATES, LICENSE.**

Ingram-Richardson Mfg. Co.

**PLATES, MARINE.**

Carbon Steel Co.

**PLATES, NAME.**

Ingram-Richardson Mfg. Co. (Enam-  
eled.)  
Matthews, James H. & Co.  
Pannier Bros. Stamp Co.

**PLATES, NICKEL STEEL.**

American Vanadium Co.  
Carnegie Steel Co.  
Carbon Steel Co.  
Pittsburgh Steel Co.

**PLATES, PIE, ENAMELED.**

Dunlap, John Co.

**PLATES, RING.**

Kelly & Jones Mfg. Co., The.  
National Tube Co.

**PLATES, ROOFING.**

Ferguson Tin Plate Co.  
Griffiths Charcoal Iron Co.

**PLATES, ROSETTE.**

Kelly & Jones Mfg. Co., The.

**PLATES FOR SAFES.**

Carbon Steel Co.

**PLATES, SCREW AND SPIKE.**

Dilworth, Porter & Co.

**PLATES, SHEAVED.**

Lanz, M. & Son.

**PLATES, SHEARED STEEL.**

Crucible Steel Co.  
Pittsburgh Steel Co.

**PLATES, SHIP.**

Carbon Steel Co.  
Carnegie Steel Co.  
Pittsburgh Steel Co.

**PLATES, SOFT CENTER.**

Carbon Steel Co.

**PLATES, SPRING STEEL.**

Union Spring & Mfg. Co.

**PLATES, STEEL.**

American Vanadium Co.  
Carbon Steel Co.  
Carnegie Steel Co.  
Crucible Steel Co.  
Jones & Laughlin Steel Co.  
Oliver Iron & Steel Co.  
Pittsburgh Steel Co.  
Republic Iron & Steel Co.

**PLATES, STOVE HOT.**

Adler, H. Co.

**PLATES, STRUCTURAL.**

Carbon Steel Co.  
Carnegie Steel Co.  
Jones & Laughlin Steel Co.  
Eichleay, John Jr., Co.  
Oliver Iron & Steel Co.  
McClintic-Marshall Construction Co.

**PLATES, TANK.**

Carbon Steel Co.  
Carnegie Steel Co.  
Crucible Steel Co.  
Jones & Laughlin Steel Co.  
Oliver Iron & Steel Co.  
Pittsburgh Steel Co.

**PLATES, TERNE.**

Canonsburg Iron & Steel Co.

**PLATES, TIE.**

Dilworth, Porter & Co.  
Oliver Iron & Steel Co.  
Pittsburgh Forge & Iron Co.

**PLATES, TIN, BLACK.**

American Sheet & Tin Plate Co.

**PLATES, TIN, BRIGHT.**

American Sheet & Tin Plate Co.

**PLATES, TYPE.**

Dilworth, Porter & Co.

**PLATES, VAULT.**

Carbon Steel Co.  
Carnegie Steel Co.  
Pittsburgh Steel Co.

**PLATES, WALL.**

Kelly & Jones Mfg. Co., The.  
National Tube Co.

**PLATFORMS, ELECTRIC POLE.**

Hubbard & Co.  
Lanz, M. & Son.

**PLATING, BLACK.**

East End Brass & Electroplating Co.

**PLATING, BRASS.**

East End Brass & Electroplating Co.

**PLATING, BRONZE.**

Cullen & Brody.  
McKenna Bros. Brass Co.

**PLATING, ELECTROPLATING.**

McKenna Bros. Brass Co.

**PLATING, GOLD.**

Cullen & Brody.  
East End Brass & Electroplating Co.

**PLATING, NICKEL.**

Cullen & Brody.  
East End Brass & Electroplating Co.  
Hague, Walter E. & Son.  
McKenna Bros. Brass Co.

**PLATING, SILVER.**

Cullen & Brody.  
Hague, Walter E. & Son.

**PLOWS, CONTRACTORS'.**

Carnegie Plow & Mfg. Co.

**PLOWS, ORDINARY WALKING.**

Carnegie Plow & Mfg. Co.

**PLUGS, BASIN.**

Standard Sanitary Mfg. Co.

**PLUGS, BATH.**

Standard Sanitary Mfg. Co.

**PLUGS, BRASS.**Kelly & Jones Mfg. Co., The.  
National Tube Co.**PLUGS, CAST IRON.**Kelly & Jones Mfg. Co., The.  
National Tube Co.**PLUGS, COUNTERSUNK.**

Kelly &amp; Jones Mfg. Co., The.

**PLUGS, ELECTRIC FUSE.**

Westinghouse Electric &amp; Mfg. Co.

**PLUGS, ELECTRIC SWITCH.**

Westinghouse Electric &amp; Mfg. Co.

**PLUGS, FUSIBLE.**Oil Well Supply Co. (Boiler.)  
Pittsburgh Valve Foundry & Construction Co. (Boiler.)  
Tranter Mfg. Co.**PLUGS, PATENT OVERFLOW.**

Standard Sanitary Mfg. Co.

**PLUGS, RADIATOR.**

Kelly &amp; Jones Mfg. Co., The.

**PLUGS, ROLL TURNING.**

Tretheway, Samuel &amp; Co.

**PLUMBAGO.**McCormack, J. S. Co.  
McCullough-Dalzell Crucible Co.**POCKETS, DRAW BAR.**

Oliver Iron &amp; Steel Co.

**POINTS, DRIVE WELL.**

National Tube Co.

**POLES, BRASS SLIDING.**

McKenna Bros. Brass Co.

**POLES, BRONZE.**

McKenna Bros. Brass Co.

**POLES, CONCRETE REINFORCING TELEGRAPH.**

Electric Welding Co.

**POLES, CONCRETE REINFORCING TELEPHONE.**

Electric Welding Co.

**POLES, STREET WIRE SUPPORT.**

Turner, C. A., Inc.

**POLES, TROLLEY.**National Tube Co. (Iron and steel.)  
Nuttal, R. D. Co. (Iron and steel.)  
Pittsburgh Steel Foundries Co. (Iron and steel.)  
Pittsburgh Trolley & Forge Co. (Iron.)  
Turner, C. A., Inc.  
Valley Forging Co.**POLISH, BAR.**

Columbia Metal Polish Co.

**POLISH, FURNITURE.**Cleanola Co., The.  
Nevin, T. H. Co.  
Suydam, M. B. Co.  
Callery, W. W. & Co.**POLISH, METAL.**Acme Polish Co.  
Becker Chemical Co.  
Callery W. W. & Co.  
Columbia Metal Polish Co.  
Duquesne Metal Polish Co.  
McKenna Bros. Brass Co.  
Suydam, M. B. Co.**POLISH, PIANO.**

Callery, W. W. &amp; Co.

**POLISH, POWDERED, BAR AND SALOON.**

Columbia Metal Polish Co.

**POLISH, SHOE.**

Pittsburgh Waterproof Co.

**POLISH, SILVER.**

Duquesne Metal Polish Co.

**POPPERS, CORN.**

Wilson Mfg. Co.

**PORCHES, ORNAMENTAL IRON.**Buechel & Davis.  
Homestead Iron Works.  
Pittsburgh Iron Works Co.  
Womersley's Ornamental Iron & Wire Works.**PORCHES, ORNAMENTAL STEEL.**

Reiling Mfg. Co.

**PORCHES, WOOD.**

Edgecomb, W. H. &amp; Sons.

**PORTABLES.**

Pittsburgh Lamp, Brass &amp; Glass Co.

**PORTER.**Independent Brewing Co.  
Liberty Brewing Co.  
Pittsburgh Brewing Co.**POSTERS, BED.**

Wilson Mfg. Co.

**POSTS, CLOTHES.**

Commercial Sash &amp; Door Co.

**POSTS, HITCHING.**Commercial Sash & Door Co. (Wood.)  
Glen Mfg. Co. (Steel.)  
Ingram-Richardson Mfg. Co. (Iron.)**POSTS, INDICATOR.**

Pittsburgh Valve Foundry &amp; Construction Co.

**POSTS, LAMP.**National Tube Co. (Electric arc.)  
Republic Iron & Steel Co. (Iron.)**POSTS, SIGN.**

Ingram-Richardson Mfg. Co.

**POSTS, WOOD.**Hill, Edwin M. Lumber Co.  
Edgecomb, W. H. & Sons.**POTASH.**

Pennsylvania Salt Mfg. Co.

**POTS, COFFEE, ENAMELED, SEAMED AND SEAMLESS.**  
Dunlap, John Co.

**POTS, FLOWER, CROCKERY.**  
Elverson, W. H. Pottery Co.

**POTS, GLASS HOUSE.**  
Pittsburg Clay Pottery Co.  
Willetts Co., The.

**POTS, GLUE.**  
Stender Coppersmith Co., The.  
(Copper.)  
Westinghouse Electric & Mfg. Co.  
(Electric.)

**POTS, SAUCE, ENAMELED.**  
Dunlap, John Co.

**POTS, SLAG.**  
Taylor-Wilson Mfg. Co.

**POTS, TALLOW.**  
Gem Mfg. Co. (Heavy brazed, polished  
and nickel steel.)  
Sands Mfg. Co. (Heavy brazed steel.)  
Wall, P. Mfg. & Supply Co.

**POTS, TALLOW, COPPER PLATED.**  
Gem Mfg. Co.

**POTS, TEA, ENAMELED.**  
Dunlap, John Co.

**POTS, TEEMING.**  
National Tube Co. (Seamless steel.)  
McCullough-Dalzell Crucible Co.

**POTTERY.**  
Elverson, W. H. Pottery Co.

**POWDER, ALUMINUM.**  
United States Aluminum Co.

**POWDER, BAKING.**  
Hubbard, George & Co.  
Knorr, W. L.

**POWDER, BRONZE.**  
Hommel, O. Co.

**POWDER, CLEANING, BATH TUB AND PORCELAIN.**  
Porcela Radax Mfg. Co.

**POWDER, HEADACHE.**  
Hollander Bros. Drug Co.

**POWDER, POLISHING.**  
Duquesne Metal Polish Co.

**POWDER, PUTTY.**  
Pittsburgh Crushed Steel Co.

**POWDER, SCOURING.**  
Strunz, S. & Son.

**POWDER, SOAP.**  
Strunz, S. & Son.

**PRESERVATIVES, VARNISH.**  
Cleanola Co., The.

**PRESERVATIVES, WOOD.**  
Barrett Mfg. Co. (Carbosota and creosote oil.)  
Suydam, M. B. Co.

**PRESERVERS, CORK LIFE.**  
Armstrong Cork Co.

**PRESERVES.**  
Cochrane Bros.

**PRESSES, BENDING, METAL.**  
Garrison, A. Foundry Co.  
Mesta Machine Co. (Steam, hydraulic.)

**PRESSES, BLANKING, SHEET METAL.**  
Garrison, A. Foundry Co.

**PRESSES, BROACHING, METAL.**  
Garrison, A. Foundry Co.

**PRESSES, CORNICE.**  
Garrison, A. Foundry Co.

**PRESSES, DRAWING, SHEET METAL.**  
Garrison, A. Foundry Co.

**PRESSES, DRILL, SCREW FEED.**  
Gem Mfg. Co.

**PRESSES, DROP.**  
Garrison, A. Foundry Co.

**PRESSES, EMBOSsing.**  
Garrison, A. Foundry Co.

**PRESSES, FILTER.**  
Scaife, William B. & Sons Co.

**PRESSES, FLANGING.**  
Garrison, A. Foundry Co.

**PRESSES, FORGING.**  
Garrison, A. Foundry Co.  
Mesta Machine Co.  
United Engineering & Foundry Co.

**PRESSES, FORMING.**  
Garrison, A. Foundry Co.

**PRESSES, GAP.**  
Garrison, A. Foundry Co.

**PRESSES, GLASS.**  
Sommerfeld Machine & Mfg. Co.

**PRESSES, HYDRAULIC.**  
Garrison, A. Foundry Co.  
Mackintosh-Hemphill Co.  
Mesta Machine Co.

**PRESSES, LARD.**  
Gloekler, Bernard Co.

**PRESSES, PUNCHING, ARMATURE.**  
Garrison, A. Foundry Co.

**PRESSES, ROLLING MILL.**  
Garrison, A. Foundry Co.

**PRESSES, SCREW.**  
Garrison, A. Foundry Co.

**PRESSES, SLITTING.**  
Garrison, A. Foundry Co.

**PRESSES, STAMPING.**  
Garrison, A. Foundry Co.

**PRESSES, STEAM.**  
Garrison, A. Foundry Co.  
Mesta Machine Co.

**PRESSES, TRIMMING.**

Garrison A. Foundry Co.  
United Engineering & Foundry Co.

**PRINTING.**

American Printing Co.  
Art Engraving & Printing Co.  
Bessemer Printing Co.  
Davis & Mason.  
Davis & Warde.  
Hall Printing Co.  
Iron City Printing Co.  
Johnston, Wm. G. & Co.  
Keystone Printing Co.  
MacGregor-Cutler Printing Co.  
Murdoch, Kerr & Co.  
McCann Printing Co.  
McCloy, A. W. Co.  
National Printing Co.  
Nicholson Printing Co.  
Pittsburgh Printing Co.  
Rising & Radcliffe.  
Shaw & Gwyer.  
Stevenson & Foster.  
Taylor, T. F. Printing Co.  
Union Printing Co.

**PROJECTILES, STEEL.**

National Tube Co.

**PROTECTORS, LIGHTING.**

Union Electric Co.  
Westinghouse Electric & Mfg. Co.

**PROTECTORS, POLE.**

Hubbard & Co.  
Lanz, M. & Son.  
Oliver Iron & Steel Co.

**PROTECTORS, SIDEWALK SIGN.**

Pittsburgh Electric Specialties Co.

**PROVERS, METER FLOW.**

Pittsburgh Meter Co.

**PUDDINGS,**

Dunlevy & Bro. Co.

**PULLERS, BAR.**

United Engineering & Foundry Co.

**PULLERS, NAIL.**

Iron City Tool Works.

**PULLERS, SPIKE.**

Hubbard & Co.  
Iron City Tool Works.  
Verona Tool Works.

**PULLERS, TACK.**

Verona Tool Works.

**PULLEYS, FRICTION CLUTCH.**

Jones & Laughlin Steel Co.  
Oil Well Supply Co.

**PULLEYS, PLAIN AND REVERSIBLE CLUTCH.**

Tillinghast, B. D. (For steam engine bed plates.)

**PULLEYS, GROOVED ROPE.**

Jones & Laughlin Steel Co.

**PULLEYS, ODLER.**

Gem Mfg. Co.

**PULLEYS, MACHINERY, CAST IRON.**

Jones & Laughlin Steel Co.

**PULLEYS, MACHINERY, FLANGED.**

Jones & Laughlin Steel Co.

**PULLEYS, SASH.**

Commercial Sash & Door Co.

**PULLEYS, SPECIAL.**

Tranter Mfg. Co.

**PULLS, DRAWER.**

McKinney Mfg. Co.

**PULPITS, CHURCH.**

Kittanning Church Seating Co.

**PULVERIZERS, PRIMING.**

Garrison, A. Foundry Co.

**PUMICE.**

Finkell-Hachmeister Chemical Co.

**PUMPING SYSTEMS, OIL.**

Tate-Jones & Co.

**PUMPS, ACID.**

Pittsburgh Valve Foundry & Construction Co.

**PUMPS, AIR.**

Hall Steam Pump Co.  
McKenna Bros. Brass Co.  
Westinghouse Machine Co.

**PUMPS, AUTOMOBILE GARAGE.**

American Electric Air Pump Co.

**PUMPS, BOAT.**

Currier, J. Lee.

**PUMPS, BOILER FEED.**

Carlin Machinery & Supply Co.

Hall Steam Pump Co.

Epping-Carpenter Co.  
Pittsburgh Valve Foundry & Construction Co.

Scaife, William B. & Sons Co.

**PUMPS, BRINE.**

Pittsburgh Valve Foundry & Construction Co.

**PUMPS, CENTRIFUGAL.**

Carlin Machinery & Supply Co.

Carlin's, Thomas Sons Co.

Epping-Carpenter Co.

Keystone Driller Co.

Wilson-Snyder Mfg. Co.

**PUMPS, CHEMICAL.**

Gillespie Mfg. Co.

**PUMPS, DREDGING.**

Pittsburgh Valve Foundry & Construction Co.

**PUMPS, ELECTRIC.**

Westinghouse Electric & Mfg. Co.

**PUMPS, ELEVATOR.**

Hall Steam Pump Co.

**PUMPS, GAS.**

Keystone Driller Co.

Massey Packer & Machine Co.

Tillinghast, B. D.

**PUMPS, GASOLINE.**

Keystone Driller Co.

**PUMPS, HYDRAULIC.**  
Epping-Carpenter Co.  
Hall Steam Pump Co.  
Pittsburgh Valve Foundry & Construction Co.

**PUMPS, JET, DEFIANCE.**  
Tranter Mfg. Co. (Sheriff, McKnight & McFeely.)

**PUMPS, LIFT.**  
Hall Steam Pump Co.

**PUMPS, MINING.**  
Hall Steam Pump Co.  
Pittsburgh Valve Foundry & Construction Co.

**PUMPS, OIL.**  
Pittsburgh Gage & Supply Co.  
("White Star.")

**PUMPS, OIL LINE.**  
Oil Well Supply Co.

**PUMPS, OIL WELL OUTFITS.**  
Evans Mfg. Co., The.

**PUMPS, PILE SINKING.**  
Hall Steam Pump Co.

**PUMPS, PROVING.**  
Oil Well Supply Co.

**PUMPS, ROTARY.**  
Diamond Machine Co. (For irrigating purposes.)  
Pittsburgh Machine Tool Co.

**PUMPS, SAND.**  
Heeter, C. M. Sons & Co.

**PUMPS, STEAM.**  
Epping-Carpenter Co.  
Hall Steam Pump Co.  
Pittsburgh Valve Foundry & Construction Co.  
Reese, James & Son.  
Wilson-Snyder Mfg. Co.

**PUMPS, SYPHON.**  
Chaplan-Fulton Mfg. Co.

**PUMPS, TANK.**  
Epping-Carpenter Co.

**PUMPS, VACUUM.**  
Hall Steam Pump Co.

**PUMPS, WATER.**  
McDowell, J. G. Mfg. Co.

**PUMPS, WATER WORKS.**  
Epping-Carpenter Co. (Steam and centrifugal.)  
Pittsburgh Valve Foundry & Construction Co.

**PUMPS, WELL.**  
Hall Steam Pump Co.  
Keystone Driller Co. (Deep.)  
Pittsburgh Valve Foundry & Construction Co.

**PUNCHES, BACKING OUT.**  
Iron City Tool Works.  
Pittsburgh Block & Mfg. Co.

**PUNCHES, BLACKSMITHS'.**  
Iron City Tool Works.  
Klein-Logan Co.

**PUNCHES, CENTER.**  
Iron City Tool Works.

**PUNCHES, HAND.**  
Hubbard & Co.  
Iron City Tool Works.

**PUNCHES, MACHINE.**  
Wilhelm, Robert.

**PUNCHES, MILL.**  
United Engineering & Foundry Co.

**PUNCHES, MULTIPLE.**  
Mackintosh-Hemphill & Co.

**PUNCHES, POWER.**  
Garrison, A. Foundry Co.

**PUNCHES, PRICK.**  
Jackson Bros.

**PUNCHES, RAILROAD TRACK.**  
Hubbard & Co.  
Iron City Tool Co.  
Klein-Logan Co.  
Verona Tool Works.

**PUNCHES AND SHEARS COMBINED.**  
Garrison, A. Foundry Co.  
Mackintosh-Hemphill & Co.

**PUNCHES, SOLID.**  
Jacksop Bros.

**PUNCHES, TIE PLUG.**  
Hubbard & Co.

**PUNCHES, TINNERS'.**  
Jackson Bros.

**PURIFIERS, AIR.**  
McGinness Co., The. (For buildings all kinds.)

**PURIFIERS, FEED WATER.**  
Scaife, William B. & Sons Co.

**PUSHERS, CAR.**  
Verona Tool Works.

**PUTTY.**  
Lawrence, W. W. & Co.  
Nevin, T. H. Co.  
Suydam, M. B. Co.

**PYROMETERS, ELECTRIC RESISTANCE.**  
Stupakoff, S. H.

**PYROMETERS, THERMO ELECTRIC.**  
Dixon, H. L. Co.  
Scientific Materials Co.  
Stupakoff, S. H.

**PYROMETERS, WATER.**  
Stupakoff, S. H.

**QUARTZWARE.**  
Scientific Materials Co.

**RACKS, COAT AND HAT.**  
McKenna Bros. Brass Co. (Brass or bronze.)

**RACKS, CUT GEAR.**

Fawcett Machine Co.  
Nuttal, R. D. Co.  
Simonds Mfg. Co.

**RACKS, FUR.**

McKenna Bros. Brass Co. (Brass or  
bronze.)

**RACKS, MACHINE GEAR.**

Nuttal, R. D. Co.

**RACKS, MAGAZINE, FOR STORES.**

McLean, W. B. Mfg. Co.

**RACKS, MEAT.**

Gloekler, Bernard Co.

**RACKS, TOWEL.**

Curtis Towel Rack Co.  
McKenna Bros. Brass Co. (Brass or  
bronze.)

**RADIATORS, HOT WATER.**

National Tube Co.  
Pressed Radiator Co.  
Reliance Heater Supply Co.

**RADIATORS, PRESSED METAL.**

Pressed Radiator Co.

**RADIATORS, STAGGERED.**

National Tube Co.

**RADIATORS, STEAM.**

National Tube Co.  
Pressed Radiator Co.  
Reliance Heater Supply Co.

**RADIATORS, WALL.**

Pressed Radiator Co.

**RADIATORS, WROUGHT.**

National Tube Co.

**RAILINGS, ALTAR, CHURCH.**

Kittanning Church Seating Co.

**RAILINGS, BANK.**

Colditz & McMinn Co. (Iron.)  
Cornwall, E. & Co.  
McKenna Bros. Brass Co. (Brass or  
bronze.)  
Rieger Iron & Wire Works.  
Tyler, W. S. Co., The.

**RAILINGS, BRASS.**

McKenna Bros. Brass Co.  
Rieger Mfg. Co.  
Star Ornamental Iron & Wire Works  
Co.

**RAILINGS, BRIDGE.**

Albree, C. B. Iron Works.  
Kratzer, W. N. & Co.  
Vilsack, Martin Co.

**RAILINGS, BRONZE.**

McKenna Bros. Brass Co.  
Star Ornamental Iron & Wire Works  
Co.

**RAILINGS, CHURCH.**

Pittsburgh Brass Mfg. Co.

**RAILINGS, IRON.**

Albree, Chester B. Iron Works.  
(Bridge.)  
Colditz & McMinn Co. (Bank.)  
Homestead Iron Works Co.

**RAILINGS, IRON.**

Keystone Ornamental Iron Co.  
Kratzer, W. N. & Co.  
Marshall Bros.  
Pittsburgh Structural Steel Co.  
Reiling Mfg. Co.  
Rieger Iron & Wire Works.  
Rieseck, P.  
Star Ornamental Iron & Wire Works  
Co.  
Sommerville Iron & Bronze Co.  
Taylor & Dean.  
Tyler, W. S. Co., The.  
Vilsack, Martin Co.  
Watt Mfg. Co.  
Womersleys Ornamental Iron Works.

**RAILINGS, OFFICE.**

Cornwall, E. & Co.  
McKenna Bros. Brass Co. (Brass or  
bronze.)  
Rieger Iron & Wire Works.  
Tyler, W. S. Co., The.

**RAILINGS, WOOD.**

Pittsburgh Hardwood Door Co.

**RAILS, BRASS AND BRONZE.**

McKenna Bros. Brass Co.

**RAILS, DOOR.**

McKenna Bros. Mfg. Co. (Brass or  
bronze.)  
McKinney Mfg. Co.

**RAILS, FOOT.**

McKenna Bros. Brass Co. (Brass or  
bronze.)

**RAILS, GAS PIPE.**

Sommerville Iron & Bronze Co.

**RAILS, LIGHT MINE.**

Jones & Laughlin Steel Co.

**RAILS, IRON AND STEEL.**

Carnegie Steel Co.  
Pittsburgh Steel Co.  
Republic Iron & Steel Co.

**RAILS, STEEL T.**

Jones & Laughlin Steel Co.  
Orenstein, Arthur Koppel Co.  
Republic Iron & Steel Co.  
Standard Chain Co.

**RAILS, WOOD PORCH AND STAIR.**

Commercial Sash & Door Co.

**RAILWAYS, ELECTRIC.**

Westinghouse Electric & Mfg. Co.

**RAINCOATS, ALL KINDS.**

London, A. L. & Son.

**RAMMERS, BLOCK AND PAVING.**

Pittsburgh Block & Mfg. Co.

**RAMMERS, MINERS' COPPER TIP.**

Charleroi Foundry & Machine Co.

**RANGES, GAS.**

Adler, H. Co.  
Bash, John C.  
Gloekler, Bernard Co.  
Howard Stove Co. (Natural.)  
Olive Stove Works.  
Stephenson Mfg. Co.  
Stove & Range Company of Pittsburgh.

**RANGES, COAL.**  
 Howard Stove Co.  
 Olive Stove Works.  
 Stove & Range Company of Pittsburgh.

**RATCHETS, COUPLING.**  
 Pittsburgh Block & Mfg. Co.

**RATCHETS, STEAMBOAT.**  
 Patterson, W. W. Co.

**RATCHETS, WAGON BRAKE.**  
 Oliver Iron & Steel Co.

**REAMERS.**  
 Jackson Bros.

**REAMERS, FLEXIBLE SHAFT.**  
 Gem Mfg. Co.

**REAMERS, TAPER STOVE.**  
 Ajax Mfg. Co.

**RECEIVERS, AIR.**  
 Munroe, R. & Sons Co.

**RECEIVERS, GAS.**  
 Munroe, R. & Sons Co.  
 Riter-Conley Mfg. Co.

**RECEIVERS, STEAM.**  
 Treadwell Construction Co.

**RECEPTORS.**  
 United States Sanitary Mfg. Co.

**RECTIFIERS, MERCURY ARC.**  
 Westinghouse Electric & Mfg. Co.

**REDUCERS, CAST IRON, BRASS AND  
 MALLEABLE.**  
 Kelly & Jones Mfg. Co., The.

**REDUCTIONS, WORM GEAR.**  
 Fawcett Machine Co.

**REELS, MOVING PICTURE MACHINE.**  
 Norris Machine Co.

**REFLECTORS, BUILDING.**  
 Bailey Reflector Co.  
 Pittsburgh Reflector & Illuminating Co.

**REFLECTORS, ELECTRIC.**  
 Ingram-Richardson Mfg. Co.  
 Westinghouse Electric & Mfg. Co.

**REFLECTORS FOR GENERAL LIGHTING  
 PURPOSES.**  
 Pittsburgh Reflector & Illuminating Co.

**REFLECTORS, HOUSE.**  
 Bailey Reflector Co.  
 Pittsburgh Reflector & Illuminating Co.

**REFLECTORS, MIRRORED AUTOMOBILE.**  
 Fry, H. C. Glass Co.

**REFLECTORS, SIDEWALK SIGN.**  
 Pittsburgh Electric Specialites Co.

**REFLECTORS, SILVERED GLASS.**  
 Macbeth-Evans Glass Co.

**REFLECTORS, SILVER PLATED.**  
 Pittsburgh Reflector & Illuminating Co.

**REFLECTORS, SWITCHBOARD.**  
 Bailey Reflector Co.

**REFRIGERATORS FOR ALL PURPOSES.**  
 Glookler, Bernard Co.

**REGISTERS, USED IN HEATING AND  
 VENTILATING.**  
 McGinness Co., The.

**REGULATORS, AUTOMATIC AIR.**  
 American Electric Air Pump Co.

**REGULATORS, BOILER FEED.**  
 Golden-Anderson Valve Specialty Co.  
 Williams Gauge Co., The.

**REGULATORS, DAMPER.**  
 Elliott Co.  
 Kelly & Jones Mfg. Co., The.  
 Pittsburgh Valve Foundry & Construc-  
 tion Co.

**REGULATORS, FEED WATER.**  
 Williams Gauge Co. ("Williams Safety.")

**REGULATORS, GAS ENGINE.**  
 Keystone Machine Co. (Special  
 patent.)  
 Pittsburgh Machine Co.

**REGULATORS, GAS PRESSURE.**  
 Chaplan-Fulton Mfg. Co.  
 Equitable Meter Co.  
 Evans Mfg. Co.  
 Gwynn Gas Burner & Engine Co.  
 Merrill, E. C. (For street, mill, factory,  
 house or home.)  
 Oil Well Supply Co.  
 Pittsburgh Meter Co.

**REGULATORS, INCANDESCENT BURNER.**  
 Frederick-Elder Co., The.

**REGULATORS, PUMP.**  
 Hall Steam Pump Co.

**REGULATORS, TEMPERATURE.**  
 Chaplan-Fulton Mfg. Co.

**REGULATORS, VOLTAGE.**  
 Westinghouse Electric & Mfg. Co.

**REGULATORS, WATER PRESSURE.**  
 Chaplan-Fulton Mfg. Co.  
 Gillespie Mfg. Co.

**REGULATORS, FOR STEAM ENGINES.**  
 Keystone Machine Co.

**RELAYS, ELECTRICAL CONTACT.**  
 Westinghouse Electric & Mfg. Co.

**RELEASES, CONCRETE.**  
 Electric Welding Co.

**RELISHES, TABLE.**  
 Heinz, H. J. Co.  
 Lutz & Schramm Co.

**REMOVERS, PAINT AND VARNISH.**  
 Ball Chemical Co.  
 Callery, W. W. & Co.  
 Lawrence, W. W. Co.

**RENOVATORS, ELECTRIC HOUSE.**  
 Electric Renovator Co.

**RESTS, GAS LOG.**  
 Superior Mfg. Co.

**RHEOSTATS, DYNAMO AND MOTOR.**  
 Westinghouse Electric & Mfg. Co.

**RIDDLES, FOUNDRY.**

Taylor &amp; Dean.

**RIGGS, DRILLING.**

Carnegie Steel Co.

Keystone Driller Co. (Portable oil and  
gas.)

National Supply Co. (Oil and water.)

**RINGS, BEETLE.**

Oliver Iron &amp; Steel Co.

**RINGS, ELECTRIC LAMP SOCKET,  
RUBBER.**

Pennsylvania Rubber Co.

**RINGS, ELECTRIC POLE.**

Hubbard &amp; Co. ("Pierce" cable.)

Lanz, M. &amp; Son.

Oliver Iron &amp; Steel Co.

**RINGS, FRUIT JAR, RUBBER.**

Pennsylvania Rubber Co.

**RINGS, HITCHING.**

Lanz, M. &amp; Son.

**RINGS, LAP.**

Standard Chain Co.

**RINGS, LUBRICATOR.**

Pennsylvania Rubber Co.

**RINGS, OILING.**

American Spiral Spring &amp; Mfg. Co.

**RINGS, PISTON, COLD DRAWN STEEL.**

Keystone Machine Co.

**RIVETERS, HYDRAULIC.**Mackintosh-Hemphill & Co.  
Mesta Machine Co.**RIVETERS, PNEUMATIC COMPRESSION.**

Albree, Chester B. Iron Works Co.

**RIVETERS, STEAM.**

Mesta Machine Co.

**RIVETS, ALUMINUM.**

Aluminum Co. of America.

**RIVETS, BARREL.**

Garland Nut &amp; Rivet Co.

**RIVETS, BOILER.**Fort Pitt Forging Co.  
Garland Nut & Rivet Co.  
Jones & Laughlin Steel Co.  
Oliver Iron & Steel Co.  
Severance, S. Mfg. Co.**RIVETS, BOLT.**

Fort Pitt Forging Co.

**RIVETS, BRIDGE.**Jones & Laughlin Steel Co.  
Lanz, M. & Son.  
Oliver Iron & Steel Co.  
Pittsburgh Forge & Iron Co.  
Pittsburgh Screw & Bolt Co.  
Townsend, C. C. & E. P.**RIVETS, CAR.**Lanz, M. & Son.  
Oliver Iron & Steel Co.**RIVETS, DRAW BAR.**

Pittsburgh Forge &amp; Iron Co.

**RIVETS, HAME.**Garland Nut & Rivet Co.  
Oliver Iron & Steel Co.**RIVETS, HINGE.**

Townsend, C. C. &amp; E. P.

**RIVETS, IRON.**Carroll-Porter Boiler & Tank Co.  
Fort Pitt Forging Co.  
Lanz, M. & Son.  
Pittsburgh Forge & Iron Co.  
Townsend, C. C. & E. P.**RIVETS, NORWAY IRON.**

Jones &amp; Laughlin Steel Co.

**RIVETS, SHIP.**Oliver Iron & Steel Co.  
Severance, S. Mfg. Co.**RIVETS, STEEL.**Carroll-Porter Boiler & Tank Co.  
Fort Pitt Forging Co.  
Lanz, M. & Son.  
Pittsburgh Forge & Iron Co.  
Pittsburgh Rivet Co.  
Townsend, C. C. & E. P.**RIVETS, STRUCTURAL WORK.**Lanz, M. & Son.  
Jones & Laughlin Steel Co.  
Oliver Iron & Steel Co.  
Pittsburgh Forge & Iron Co.  
Pittsburgh Screw & Bolt Co.  
Severance, S. Mfg. Co.  
Townsend, C. C. & E. P.**RIVETS, TANK.**Fort Pitt Forging Co.  
Jones & Laughlin Steel Co.  
Oliver Iron & Steel Co.  
Pittsburgh Rivet Co.  
Pittsburgh Screw & Bolt Co.  
Severance, S. Mfg. Co.**RIVETS, TINNERS.**

Townsend, C. C. &amp; E. P.

**RIVETS, TIRE, WAGON.**

Oliver Iron &amp; Steel Co.

**ROASTERS AND BAKERS, ENAMELED.**

Dunlap, John Co.

**RODS, ALUMINUM.**

Aluminum Co. of America.

**RODS, ANCHOR.**Electric Welding Co.  
Graham Nut Co.  
Lanz, M. & Son.  
Oliver Iron & Steel Co.  
Pittsburgh Rivet Co.**RODS, AWNING.**

Oliver Iron &amp; Steel Co.

**RODS, BRIDGE.**Graham Nut Co.  
Lanz, M. & Son.  
Oliver Iron & Steel Co.  
Pittsburgh Rivet Co.  
Scaife, William B. & Sons Co.**RODS, CAR.**

Western Tool &amp; Forge Co.

**RODS, CONNECTING.**

Carnegie Steel Co.  
Crucible Steel Co. of America.  
Jones & Laughlin Steel Co.  
Graham Nut Co.  
Lanz, M. & Son.  
Leard, W. E. (For engine and machine.)  
Oliver Iron & Steel Co.  
Pittsburgh Rivet Co.  
Western Tool & Forge Co.

**RODS, COPPER.**

Hussey, C. G. & Co.

**RODS, DENTAL, WIRE FOR.**

Kidd Bros. & Burgher Steel Wire Co.

**RODS, DRILL.**

Crucible Steel Co. of America.  
Globe Wire Co. (Polished.)  
Kidd Bros. & Burgher Steel Wire Co.  
National Tube Co.  
Oil Well Supply Co.  
Pittsburgh Tool Steel Wire Co.

**RODS, EYE.**

Lanz, M. & Son.  
Oliver Iron & Steel Co.  
Pittsburgh Rivet Co.

**RODS, GRASS.**

Oliver Iron & Steel Co.

**RODS, GUY.**

Lanz, M. & Son.  
Oliver Iron & Steel Co.  
Pittsburgh Rivet Co.

**RODS, KEY.**

Columbia Steel & Shafting Co. (Key.)

**RODS, LIGHTNING.**

Kress, George R. Co.

**RODS, LOOSE BENT FOR REINFORCING CONCRETE WORK.**

Electric Welding Co.

**RODS, PISTON.**

Carnegie Steel Co.  
Columbia Steel & Shafting Co.  
Crucible Steel Co. of America.  
Jones & Laughlin Steel Co.  
Pittsburgh Steel Co.  
Braeburn Steel Co.

**RODS, PUMP.**

Keystone Driller Co.  
Keystone Steel Shafting Co.  
Oil Well Supply Co.  
Oliver Iron & Steel Co.  
Republic Iron & Steel Co.

**RODS, ROLLER BEARING, HIGH CARBON.**

Union Drawn Steel Co. (Cold drawn.)

**RODS, TRUSS.**

Turner, C. A., Inc.

**RODS, TWISTED.**

Electric Welding Co. (For concrete work.)

**RODS, UPSET END.**

Oliver Iron & Steel Co.  
Pittsburgh Forge & Iron Co. (Plain.)

**RODS, WIRE.**

Kidd Bros. & Burgher Steel Wire Co.  
(All kinds.)  
Page Woven Wire Fence Co.

**ROLLERS, FARM LAND.**

Carnegie Plow & Mfg. Co.

**ROLLERS, GLASS.**

Garrison, A. Foundry Co.

**ROLLERS, GUM WOOD.**

Pittsburgh Block & Mfg. Co.

**ROLLERS, PRINTERS'.**

Bingham's, Samuel Son Mfg. Co.  
Hart & Zugelder.

**ROLLERS, ROAD.**

Duquesne Co., The.

**ROLLS, BENDING, PLATE.**

Garrison, A. Foundry Co.  
Taylor-Wilson Mfg. Co.  
United Engineering & Foundry Co.

**ROLLS, CALENDER.**

Garrison, A. Foundry Co.

**ROLLS, CHILLED.**

Garrison, A. Foundry Co.  
Lewis Foundry & Machine Co.  
Mesta Machine Co.  
Pittsburgh Iron & Steel Foundries Co.  
Seaman-Sleeth Co.  
United Engineering & Foundry Co.

**ROLLS, CROSS.**

Taylor-Wilson Mfg. Co. (Pipe.)  
United Engineering & Foundry Co.

**ROLLS, CRUSHING.**

Garrison, A. Foundry Co.

**ROLLS, FORGING.**

Garrison, A. Foundry Co.

**ROLLS, FOR ROLLING MILLS.**

Seaman-Sleeth Co. (Chilled iron and steel, steel and sand.)

**ROLLS, SAND.**

Garrison, A. Foundry Co.  
Lewis Foundry & Machine Co.  
Mesta Machine Co.  
Pittsburgh Iron & Steel Foundries Co.  
Seaman-Sleeth Co.  
United Engineering & Foundry Co.

**ROLLS, SEMI-STEEL.**

Seaman-Sleeth Co.

**ROLLS, STEEL.**

Braddock Machine & Mfg. Co.  
Garrison, A. Foundry Co.  
Hyde Park Foundry & Machine Co.  
Lewis Foundry & Machine Co.  
Mesta Machine Co.  
Mackintosh-Hemphill & Co.  
Pittsburgh Steel Foundry.  
Pittsburgh Iron & Steel Foundries Co.  
Seaman-Sleeth Co.  
Trettheway, Samuel & Co. (Hardened forged.)  
United Engineering & Foundry Co.

**ROLLS, STRAIGHTENING.**

Garrison, A. Foundry Co.

|   |   |
|---|---|
| <b>ROLLS, TAPERING.</b><br>Garrison, A. Foundry Co.   | <b>RULES, ROLLING PARALLEL.</b><br>Elliott, B. K. Co.   |
| <b>ROLLS, TYPEWRITER.</b><br>Pennsylvania Rubber Co.  | <b>RUNWAYS, CRANE.</b><br>Scaife. William B. & Sons Co.   |
| <b>ROLLS, WELDING.</b><br>United Engineering & Foundry Co.  | <b>SACKS, BUCKSKIN CEMENT.</b><br>Union Paper Mill Co.  |
| <b>ROOFING, ASBESTOS PROTECTED.</b><br>Asbestos Protected Metals Co.  | <b>SACKS, BUCKSKIN CHOP.</b><br>Union Paper Mill Co.  |
| <b>ROOFING, BUILT UP FELT.</b><br>Barrett Mfg. Co.  | <b>SACKS, PAPER BATES VALVE.</b><br>Rutherford Paper Co.  |
| <b>ROOFING, CORRUGATED IRON.</b><br>Pittsburgh Cornice & Roofing Co.  | <b>SACKS, PAPER CARBON.</b><br>Rutherford Paper Co.   |
| <b>ROOFING, IRON.</b><br>American Sheet & Tin Plate Co.<br>Pittsburgh Bridge & Iron Works.<br>Pittsburgh Cornice & Roofing Co.<br>Riter-Conley Mfg. Co. | <b>SACKS, PAPER CEMENT.</b><br>Rutherford Paper Co.<br>Tarentum Paper Mills.  |
| <b>ROOFING, PITCH, "BLACK DIAMOND."</b><br>Barrett Mfg. Co.   | <b>SACKS, PAPER FLOUR.</b><br>Rutherford Paper Co.<br>Tarentum Paper Mills.   |
| <b>ROOFING, PLATE.</b><br>Carnegie Steel Co.  | <b>SACKS, PAPER LIME.</b><br>Rutherford Paper Co.<br>Tarentum Paper Mills.  |
| <b>ROOFING, PORTABLE GRAVEL.</b><br>Young, J. F. Co.  | <b>SACKS, POTTERY FILTER PRESS.</b><br>Pittsburgh Awning Co.  |
| <b>ROOFING, PREPARED MINERAL SUR-FACED.</b><br>Barrett Mfg. Co.   | <b>SADDLES, PIPE.</b><br>Best Mfg. Co.<br>Kelly & Jones Mfg. Co., The. (Cast or malleable.)<br>Munroe, R. & Sons. ("Eclipse.")<br>National Tube Co. (Strap.)<br>Oil Well Supply Co.<br>Turner, C. A., Inc. (Wrought.) |
| <b>ROOFING, SINGLE PLY TARRED FELT.</b><br>Barrett Mfg. Co.   | <b>SAFES, ALL KINDS, FIRE AND BURGLAR PROOF.</b><br>Barnes Safe & Lock Co.<br>Clark Safe & Vault Co.<br>United States Safe Co.  |
| <b>ROOFING, STEEL, SHEET.</b><br>American Sheet & Tin Plate Co.<br>Carnegie Steel Co.   | <b>SAFES, STEEL FOR.</b><br>Crucible Steel Co.  |
| <b>ROOFING, TERNE PLATE.</b><br>Standard Tin Plate Co.  | <b>SALAMANDERS.</b><br>Munroc, R. & Sons.<br>Turner, C. A., Inc.  |
| <b>ROPE, BRAIDED.</b><br>Gem Mfg. Co.   | <b>SALT.</b><br>Beck, John A. & Co. ("Non-Harden-ing.")<br>Pennsylvania Hide & Leather Co.<br>Pennsylvania Salt Mfg. Co. (Cake.)  |
| <b>ROPE, RAWHIDE.</b><br>Gem Mfg. Co.   | <b>SAND, BUILDING.</b><br>Coraopolis Industrial Co.<br>Davidson, J. K. & Bro.<br>Enterprise Sand Co.<br>Iron City Sand Co.<br>National Sand & Gravel Co.<br>Rodgers Sand Co.  |
| <b>ROPE, WIRE.</b><br>Milholland, J. & J. B.  | <b>SAND, CORE.</b><br>Jiles, James & Co.  |
| <b>ROSETTES, WOOD PRESSED.</b><br>Commercial Sash & Door Co.  | <b>SAND, FURNACE.</b><br>Enterprise Sand Co.  |
| <b>ROSIN.</b><br>Chamberlain & Johnson.   | <b>SAND, MOULDING.</b><br>Enterprise Sand Co.<br>Jiles, James & Co. (Ingot and bronze.)   |
| <b>ROUGE.</b><br>Pittsburgh Crushed Steel Co.   | <b>SAND, ROLL.</b><br>Jiles, James & Co.  |
| <b>ROUNDS, LADDER.</b><br>Oliver Iron & Steel Co.   |   |
| <b>RUBBER GOODS.</b><br>Pennsylvania Rubber Co.   |   |
| <b>RUGS, COCOANUT FIBRE.</b><br>Duquesne Rug Co.  |   |
| <b>RULERS, PAPER.</b><br>Trimbur & Highley.   |   |
| <b>RULES, CHEMISTS' SLIDE.</b><br>Scientific Materials Co.  |   |

**SARSAPARILLA, "POLAR,"**  
Water Delivery Co.

**SASHES, WINDOW, FIRE PROOF.**  
Standard Sheet Metal Mfg. Co.

**SASHES, WINDOW, SHEET METAL.**  
Keighley, S. Metal Ceiling Mfg. Co.

**SASHES, WOOD, DOOR AND WINDOW.**  
Beaver Falls Planing Mill & Lumber Co.  
Commercial Sash & Door Co.  
Diebold Lumber & Mfg. Co.  
Dubarry, G. D. & Co.  
Edgecomb, W. H. & Sons.  
Eiler Lumber & Mill Co.  
Feath & Kerr.  
Hill, Edwin M.  
Martsolf Bros.  
May Lumber Co.  
Miller, William & Sons.  
Mitchell, J. S. & Sons.  
McDaniel, R. B. Co.  
Pennsylvania Door & Sash Co.  
Pittsburgh Hardwood Door Co.  
Simons, M. Sons.  
Walker & Slater.

**SAUCES, TABLE.**

Heinz, H. J. Co.  
Hirsch Bros. & Co.  
Lutz & Schramm Co.

**SAW BLADES.**

Champion Saw & Machine Co.  
Emerson-Smith & Co. (Circular.)

**SAWS, BAND.**

Carlin Machinery & Supply Co. (Metal.)  
Emerson-Smith & Co. (Wood cutting.)  
Lippert, E. T. Saw Co. (Wood or  
metal cutting.)

**SAWS, CIRCULAR, HOT OR COLD, IRON  
OR STEEL.**

Lippert, E. T. Saw Co.

**SAWS, CIRCULAR, WOOD CUTTING.**

Lippert, E. T. Saw Co.

**SAWS, COLD METAL CUTTING.**

Carlin's Thomas Sons Co.  
Lippert, E. T. Saw Co.  
United Engineering & Foundry Co.

**SAWS, CROSS CUT, HAND.**

Emerson-Smith & Co.

**SAWS, EDGING,**

Emerson-Smith & Co.

**SAWS, FRICTION.**

Emerson-Smith & Co.

**SAWS, GANG.**

Emerson-Smith & Co.

**SAWS, GROOVING.**

Emerson-Smith & Co.

**SAWS, HOT METAL CUTTING.**

Emerson-Smith & Co. (Iron.)  
Garrison, A. Foundry Co.  
Lippert, E. T. Saw Co.  
Taylor-Wilson Mfg. Co.  
United Engineering & Foundry Co.

**SAWS, MACHINERY DRAG.**

Emerson-Smith & Co.

**SAWS, METAL.**

Carlin Machinery & Supply Co.  
Carlin's, Thomas Sons Co. (Cold.)  
Emerson-Smith & Co.  
Garrison, A. Foundry Co. (Hot.)  
Lippert, E. T. Saw Co.  
Mesta Machine Co. (Hot.)  
Hunter Saw & Machine Co.  
Taylor-Wilson Mfg. Co. (Hot.)  
United Engineering & Foundry Co.  
Mackintosh-Hemphill & Co. (Hot and  
cold.)

**SAWS, MITRE BOX.**

Emerson-Smith & Co.

**SAWS, SCROLL.**

Emerson-Smith & Co.

**SAWS, SLATE MACHINE.**

Emerson-Smith & Co.

**SCALES, ABATTOIR.**

Standard Scale & Supply Co.

**SCALES, ARMY AND NAVY.**

Standard Scale & Supply Co.

**SCALES, BATH.**

Standard Scale & Supply Co.

**SCALES, CHARGING.**

Standard Scale & Supply Co.

**SCALES, COAL.**

Standard Scale & Supply Co.

**SCALES, COPPER.**

Standard Scale & Supply Co.

**SCALES, COUNTER.**

Standard Scale & Supply Co.

**SCALES, CRANE.**

Standard Scale & Supply Co.

**SCALES, DISAPPEARING.**

Standard Scale & Supply Co.

**SCALES, DUMP.**

Standard Scale & Supply Co.

**SCALES, FISH.**

Standard Scale & Supply Co.

**SCALES, FOUNDRY.**

Standard Scale & Supply Co.

**SCALES, GLASS WORKS.**

Standard Scale & Supply Co.

**SCALES, HOPPER.**

Standard Scale & Supply Co.

**SCALES, HOUSEHOLD.**

Standard Scale & Supply Co.

**SCALES, LARRY.**

Standard Scale & Supply Co.

**SCALES, LETTER.**

Standard Scale & Supply Co.

**SCALES, METAL.**

Standard Scale & Supply Co.

**SCALES, ORE.**

Standard Scale & Supply Co.

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| <b>SCALES, PACKAGE.</b>  | <b>SCRAPERS, SINGLE OR DOUBLE END.</b>   |
| Standard Scale & Supply Co.  | Hubbard & Co.  |
| <b>SCALES, PIG IRON.</b>   | <b>SCREENS, BANK.</b>  |
| Standard Scale & Supply Co.  | Rieger Iron & Wire Works.  |
| <b>SCALES, RECORDING.</b>  | <b>SCREENS, CAR.</b>   |
| Standard Scale & Supply Co.  | American Car Screen Co.  |
| <b>SCALES, REVOLVING.</b>  | <b>SCREENS, COAL.</b>  |
| Standard Scale & Supply Co.  | Rieger Iron & Wire Works.<br>Taylor & Dean.  |
| <b>SCALES, ROLLING MILL.</b>                                       | <b>SCREENS, DOOR FLY.</b>  |
| Standard Scale & Supply Co.  | Stuckey, William A.  |
| <b>SCALES, SPECIAL.</b>  | <b>SCREENS, FLY.</b>   |
| Standard Scale & Supply Co.  | Mackintosh, George P. & Co.<br>Stuckey, William A. (Door and window.)  |
| <b>SCALES, SPRING.</b>   | <b>SCREENS, GAUZE COVERED VENTILATION.</b>   |
| Standard Scale & Supply Co.  | Mackintosh, George P. & Co.  |
| <b>SCALES, SUSPENSION.</b>   | <b>SCREENS, GRAVEL.</b>  |
| Standard Scale & Supply Co.  | Taylor & Dean.   |
| <b>SCALES, TRACK.</b>  | <b>SCREENS, OFFICE.</b>  |
| Standard Scale & Supply Co.  | Rieger Iron & Wire Works.  |
| <b>SCALES, WAGON.</b>  | <b>SCREENS, SAND.</b>  |
| Standard Scale & Supply Co.  | Rieger Iron & Wire Works.<br>Taylor & Dean.  |
| <b>SCALES, WEIGHING.</b>   | <b>SCREENS, WINDOW, METAL.</b>   |
| Standard Scale & Supply Co.  | Baker, W. J. Co.<br>Rieger Iron & Wire Works.<br>Taylor & Dean.  |
| <b>SCOOPS, ALL KINDS.</b>  | <b>SCREENS, WINDOW, PROTECTIVE, HOSPITALS AND INSTITUTIONS.</b>  |
| Ames Shovel & Tool Co.<br>Russell, J. C. Shovel Works.             | Protective Window Co., The.  |
| <b>SCOOPS, CHARGING.</b>   | <b>SCREENS, WIRE.</b>  |
| Hubbard & Co.  | Iron City Wire Works. (Heavy.)<br>Vilsack, Martin Co.  |
| <b>SCOOPS, COAL.</b>   | <b>SCREWS, BRASS.</b>  |
| Hubbard, & Co.<br>Hussey-Binns Shovel Co.<br>Pittsburgh Shovel Co. | Pittsburgh Screw & Bolt Co.  |
| <b>SCOOPS, FIRING.</b>   | <b>SCREWS, CAP.</b>  |
| Hubbard & Co.  | Pittsburgh Screw & Bolt Co.  |
| <b>SCOOPS, FURNACE.</b>  | <b>SCREWS, COACH.</b>  |
| Pittsburgh Shovel Co.  | Graham Nut Co.<br>Lanz, M. & Son.<br>Oliver Iron & Steel Co.<br>Pittsburgh Screw & Bolt Co.<br>Republic Iron & Steel Co. |
| <b>SCOOPS, GRAIN.</b>  | <b>SCREWS, COLLAR.</b>   |
| Hubbard & Co.<br>Hussey-Binns Shovel Co.                           | Pittsburgh Screw & Bolt Co.  |
| <b>SCOOPS, LOCOMOTIVE.</b>   | <b>SCREWS, DRIVE.</b>  |
| Hussey-Binns Shovel Co.  | Lanz, M. & Son.<br>Oliver Iron & Steel Co.   |
| <b>SCOOPS, ORE</b>   | <b>SCREWS, FEED.</b>   |
| Hubbard & Co.  | Standard Gauge Steel Co.   |
| <b>SCOOPS, POTATO.</b>   | <b>SCREWS, GIMLET POINT.</b>   |
| Hubbard & Co.  | Republic Iron & Steel Co.  |
| <b>SCOOPS, SAW DUST.</b>   | <b>SCREWS, HANGER.</b>   |
| Hubbard & Co.  | Oliver Iron & Steel Co.  |
| <b>SCRAPERS, BOILER TUBE.</b>                                      | <b>SCREWS, HOOK AND EYE.</b>   |
| Gem Mfg. Co.   | Oliver Iron & Steel Co.  |
| <b>SCRAPERS, COAL MINERS.</b>                                      |  |
| Klein-Logan Mfg. Co.   |  |
| <b>SCRAPERS, FLUE.</b>   |  |
| Gem Mfg. Co.   |  |
| <b>SCRAPERS, SIDEWALK.</b>   |  |
| Pittsburgh Shovel Co.  |  |

**SCREWS, LAG.**

Graham Nut Co.  
Lanz, M. & Son.  
Oliver Iron & Steel Co.  
Pittsburgh Screw & Bolt Co.

**SCREWS, MACHINE.**

Pittsburgh Screw & Bolt Co.

**SCREWS, SET.**

Fort Pitt Forge Co.  
Pittsburgh Screw & Bolt Co.

**SCREWS, SKEIN.**

Republic Iron & Steel Co.

**SCREWS, STUD.**

Republic Iron & Steel Co.

**SCREWS, TAMPING SET.**

Fort Pitt Forge Co.

**SCYTHES.**

American Axe & Tool Co.

**SEALS, CORPORATION.**

Matthews, James H. & Co.  
Pannier Bros. Stamp Co.

**SEALS, LEAD CAR.**

Matthews, James H. & Co.

**SEALS, METER.**

Westinghouse Electric & Mfg. Co.

**SEALS, MINERAL SEAL 300.**

Miller's, A. D. Sons Co.

**SEALS, NOTARY.**

Matthews, James H. & Co.  
Pannier Bros. Stamp Co.

**SEALS, WAX.**

Matthews, James H. & Co.  
Pannier Bros. Stamp Co.

**SEATS, AUTOMOBILE THIRD PASSENGER, STEEL.**

Keystone Sheet Metal Co.

**SEATS, BATH TUB.**

Standard Sanitary Mfg. Co.  
United States Sanitary Mfg. Co.

**SEATS, BUGGY, STEEL.**

Keystone Sheet Metal Co.

**SEATS, CLOSET.**

Cowan Mfg. Co.  
Standard Sanitary Mfg. Co.

**SEATS, POLE.**

Hubbard & Co.

**SEATS, VALVE AND BALL.**

Evans Mfg. Co., The.

**SEPARATORS, BRASS.**

McCormack, J. S. Co.

**SEPARATORS, GAS.**

Riter-Conley Mfg. Co.

**SEPARATORS, IRON.**

McCormack, J. S. Co.

**SEPARATORS, STEAM.**

Best Mfg. Co.  
Munroe, R. & Sons.  
Riter-Conley Mfg. Co.

**SEPARATORS, STEAM AND OIL.**

Elliott Co.  
Pittsburgh Gage & Supply Co. ("Pittsburgh.")  
Pittsburgh Valve Foundry & Construction Co.

**SETS, BULL.**

Hubbard & Co.

**SETS, BUTTON.**

Hubbard & Co.

**SETS, HOOP.**

Hubbard & Co.

**SETS, NAIL.**

Jackson Bros.

**SETS, RIVET.**

Pittsburgh Block & Mfg. Co.

**SETTEES, IRON.**

Rieger Iron & Wire Works. (Lawn.)  
Taylor & Dean.

**SHACKLES, CHAIN.**

McKay, James & Co.  
Patterson, W. W. Co.  
Standard Chain Co.

**SHACKLES, GEAR SPRING FOR WAGONS.**

Diamond Forging & Mfg. Co.

**SHACKLES, SPRING BAR FOR WAGONS.**

Diamond Forging & Mfg. Co.

**SHADES, CANDLE.**

Phoenix Glass Co.

**SHADES, ELECTRIC LIGHT.**

Bailey Reflector Co.  
Consolidated Lamp & Glass Co.  
Mack Glass Co.  
Macbeth-Evans Glass Co.  
Phoenix Glass Co.  
Semmer, Phillip Co. (Mosaic.)  
United States Glass Co.

**SHADES, GAS LIGHT.**

Bailey Reflector Co.  
Consolidated Lamp & Glass Co.  
Macbeth-Evans Glass Co.  
Mack Glass Co.  
Phoenix Glass Co.

**SHADES, LAMP.**

Phoenix Glass Co.  
Pittsburgh Lamp, Brass & Glass Co.  
Semmer, Phillip Co. (Mosaic.)  
United States Glass Co. (Blown or pressed.)

**SHADES, MIRROR.**

Bailey Reflector Co.

**SHADES, MOSAIC.**

Semmer, Phillip Co.

**SHADES, PORCELAIN.**

Phoenix Glass Co.

**SHADES, WINDOW.**

Brown & Co. (Canvas.)  
Pittsburgh Dry Goods Co.

**SHAFTING, CRANK.**

Carnegie Steel Co.  
Jones & Laughlin Steel Co.  
Pittsburgh Steel Co.

**SHAFTING, FLEXIBLE.**

Gem Mfg. Co.

**SHAFTING, IRON.**Jones & Laughlin Steel Co.  
Lockhart Iron & Steel Co.**SHAFTING, KEY SEATING.**Lockhart Iron & Steel Co.  
Standard Gauge Steel Co.**SHAFTING, STEEL.**American Bridge Co.  
Jones & Laughlin Steel Co.  
Lockhart Iron & Steel Co.**SHAFTING, STEEL, COLD DRAWN.**Columbia Steel Shafting Co. (Turned.)  
Crucible Steel Co. of America.  
Republic Iron & Steel Co.  
Union Drawn Steel Co.**SHAFTING, STEEL, HEAVY FORGED.**

Pittsburgh Forge &amp; Iron Co.

**SHAFTING, STEEL, HOLLOW.**

National Tube Co.

**SHAFTING, STEEL, POLISHED.**

Columbia Steel &amp; Shafting Co.

**SHAFTS, FOR AIR VALVES.**

Dixon, Charles E. &amp; Son.

**SHAFTS, CAM.**

Western Tool &amp; Forge Co.

**SHAFTS, CRANK.**Braeburn Steel Co.  
Carnegie Steel Co.  
Crescent Forgings Co.  
Standard Gauge Steel Co. (Automobile.)  
Western Tool & Forge Co. (Automobile.)**SHAFTS, FORGED.**

Pittsburgh Forge &amp; Iron Co.

**SHAFTS, MARINE.**

Carbon Steel Co.

**SHAFTS, MOTOR BOAT PROPELLER.**

National Tube Co.

**SHAFTS, NICKEL STEEL.**

Carbon Steel Co.

**SHAFTS, TELESCOPE.**

Gem Mfg. Co.

**SHAPES, AGRICULTURAL.**Carnegie Steel Co.  
Pennsylvania Drop Forging Co.**SHAPES, FLATS.**Carnegie Steel Co.  
Pittsburgh Steel Co.**SHAPES, HALF OVALS AND ROUNDS.**Carnegie Steel Co.  
Pittsburgh Steel Co.**SHAPES, HEXAGON.**Carnegie Steel Co.  
Pittsburgh Steel Co.**SHAPES, IRON.**Booth, J. B. & Co.  
Jones & Laughlin Steel Co.**SHAPES, OVALS.**Carnegie Steel Co.  
Pittsburgh Steel Co.**SHAPES, PLOW.**Jones & Laughlin Steel Co.  
Universal Rolling Mill Co. (Steel.)**SHAPES, ROUND.**Carnegie Steel Co.  
Pittsburgh Steel Co.**SHAPES, SPECIAL.**Carnegie Steel Co.  
Kidd Bros. & Burgher Steel Wire Co.  
Pittsburgh Steel Co.**SHAPES, SQUARE.**Carnegie Steel Co.  
Pittsburgh Steel Co.**SHAPES, STEEL.**Booth, J. B. & Co.  
Carnegie Steel Co.  
Pittsburgh Steel Co.**SHAPES, STEEL, CARBON TOOL.**

Vulcan Crucible Steel Co.

**SHAPES, STEEL, COLD DRAWN.**Columbia Steel & Shafting Co.  
Kidd Bros. & Burgher Steel Wire Co.  
(Hard or soft.)**SHAPES, STEEL, CUT.**

Universal Rolling Mill Co.

**SHAPES, STEEL, POLISHED.**

Columbia Steel &amp; Shafting Co.

**SHAPES, STRUCTURAL, ROLLED.**Carnegie Steel Co.  
Pittsburgh Steel Co.**SHAVINGS, CORK.**

Armstrong Cork Co.

**SHEARS, ALLIGATOR.**Carlin's Thomas Sons Co.  
Garrison, A. Foundry Co.**SHEARS, BAR IRON.**Garrison, A. Foundry Co.  
Mackintosh-Hemphill & Co.  
Mesta Machine Co.  
Phillips & McLaren.**SHEARS, BILLET.**Garrison, A. Foundry Co.  
Mackintosh-Hemphill & Co.**SHEARS, BLOOM.**Garrison, A. Foundry Co.  
Mackintosh-Hemphill & Co.**SHEARS, CLIPPING.**

United Engineering &amp; Foundry Co.

**SHEARS, CROCODILE.**

Garrison, A. Foundry Co.

**SHEARS, DOUBLING.**Garrison, A. Foundry Co.  
Lewis Foundry & Machine Co.  
Mesta Machine Co.  
United Engineering & Foundry Co.**SHEARS, GATE.**

Garrison, A. Foundry Co.

**SHEARS, GUILLOTINE.**

United Engineering &amp; Foundry Co.

**SHEARS, HYDRAULIC.**

Garrison, A. Foundry Co.

Mesta Machine Co.

United Engineering &amp; Foundry Co.

**SHEARS, LEVER.**

Garrison, A. Foundry Co. (Metal cutting.)

United Engineering &amp; Foundry Co.

**SHEARS, MUCK BAR.**

Garrison, A. Foundry Co.

**SHEARS, PLATE.**

Garrison, A. Foundry Co.

Lewis Foundry &amp; Machine Co. (Heavy mill.)

Union Foundry &amp; Machine Co. (Heavy mill.)

United Engineering &amp; Foundry Co.

**SHEARS, POWER.**

Garrison, A. Foundry Co.

**SHEARS, ROTARY.**

Garrison, A. Foundry Co.

**SHEARS, ROTARY CIRCLE.**

Garrison, A. Foundry Co.

**SHEARS, SLAB.**

Mackintosh-Hemphill &amp; Co.

**SHEARS, SLITTING.**

Garrison, A. Foundry Co.

United Engineering &amp; Foundry Co.

**SHEARS, SQUARING, HEAVY IRON AND STEEL MILL.**

Garrison, A. Foundry Co.

Lewis Foundry &amp; Machine Co.

Mackintosh-Hemphill &amp; Co.

Mesta Machine Co.

Union Foundry &amp; Machine Co.

United Engineering &amp; Foundry Co.

**SHEARS, STEAM.**

Mesta Machine Co.

**SHEARS, VERTICAL.**

United Engineering &amp; Foundry Co.

**SHEATHING, COPPER.**

Hussey, C. G. &amp; Co.

**SHEAVES, CAST IRON.**

Pittsburgh Block &amp; Mfg. Co.

**SHEAVES, CAST STEEL.**

Pittsburgh Block &amp; Mfg. Co.

**SHEAVES, HAULAGE TACKLE BLOCK.**

Greensburg Foundry &amp; Machine Co.

**SHEAVES, POWER TRANSMISSION.**

Jones &amp; Laughlin Steel Co.

**SHEAVES, TACKLE BLOCK.**

Greensburg Foundry &amp; Machine Co. (Haulage.)

Jones &amp; Laughlin Steel Co.

Patterson, W. W. Co.

Union Foundry &amp; Machine Co. (Wire and manilla.)

**SHEAVES, WIRE AND MANILLA.**

Herron-Webb Engineering Co.

Union Foundry &amp; Machine Co.

**SHEETS, ALUMINUM.**

Alumiinum Company of America.

**SHEETS, ARMATURE.**

West Penn Steel Co.

**SHEETS, ASBESTOS COATED STEEL.**

Asbestos Protected Metal Co.

**SHEETS, BLACK.**

Allegheny Steel Co. (Iron.)

American Sheet &amp; Tin Plate Co. (Iron and steel.)

Inipervious Sheet Steel Co. (Enameled steel.)

West Penn Steel Co. (Steel.)

Zug Iron &amp; Steel Co. (Steel.)

**SHEETS, COPPER.**

Crucible Steel Company of America.

**SHEETS, CORRUGATED.**

Allegheny Steel Co.

Scaife, William B. &amp; Sons Co.

Universal Rolling Mills Co.

Zug Iron &amp; Steel Co.

**SHEETS, DEEP DRAWING.**

Canonsburg Steel &amp; Iron Works.

**SHEETS, ENAMELING IRON AND STEEL.**

Canonsburg Steel &amp; Iron Works.

**SHEETS, FIRE BOX.**

Crucible Steel Co. of America.

**SHEETS, GALVANIZED.**

Allegheny Steel Co. (Iron.)

American Sheet &amp; Tin Plate Co. (Iron and steel.)

Griffiths Charcoal Iron Mills. (Iron and steel.)

Scaife, William B. &amp; Sons Co. (Iron and steel.)

Zug Iron &amp; Steel Co. (Steel.)

**SHEETS, IRON.**

Griffiths Charcoal Iron Co.

**SHEETS, IRON, BLACK.**

Allegheny Steel Co.

American Sheet &amp; Tin Plate Co.

**SHEETS, IRON, CORRUGATED.**

Allegheny Steel Co.

Scaife, William B. &amp; Sons Co.

**SHEETS, IRON, FLAT.**

Allegheny Steel Co.

**SHEETS, IRON, GALVANIZED.**

Allegheny Steel Co.

American Sheet &amp; Tin Plate Co.

Griffiths Charcoal Iron Mill.

Scaife, William B. &amp; Sons Co.

**SHEETS, IRON, PLANISHED.**

American Sheet &amp; Tin Plate Co.

**SHEETS, RANGE.**

Canonsburg Steel &amp; Iron Works.

**SHEETS, STAMPING.**

Canonsburg Steel &amp; Iron Works.

**SHEETS, STEEL.**  
Colonial Steel Co.  
Jones & Laughlin Steel Co.

**SHEETS, STEEL, ASBESTOS COATED.**  
Asbestos Protected Metal Co.

**SHEETS, STEEL, BLACK.**  
American Sheet & Tin Plate Co.  
Zug Iron & Steel Co.

**SHEETS, STEEL, COLD ROLLED.**  
Morris & Bailey Co.

**SHEETS, STEEL, CORRUGATED.**  
American Sheet & Tin Plate Co.  
Scaife, William B. & Sons Co.  
Zug Iron & Steel Co.

**SHEETS, STEEL, FOR CUTLERY.**  
Jessop Steel Co.

**SHEETS, STEEL, DISC.**  
Universal Rolling Mill Co.

**SHEETS, STEEL, ENAMELED.**  
Impervious Sheet Steel Co.

**SHEETS, STEEL, FOR ELECTRICAL PURPOSES.**  
Allegheny Steel Co.  
American Sheet & Tin Plate Co.

**SHEETS, STEEL, FOR FURNITURE.**  
Allegheny Steel Co.

**SHEETS, STEEL, GALVANIZED.**  
American Sheet & Tin Plate Co.  
Griffiths Charcoal Iron Mill.  
Zug Iron & Steel Co.

**SHEETS, STEEL, OPEN HEARTH.**  
West Penn Steel Co.

**SHEETS, STEEL, POLISHED.**  
American Sheet & Tin Plate Co.

**SHEETS, STEEL, ROOFING.**  
American Sheet & Tin Plate Co.

**SHEETS, STEEL, SAW.**  
Universal Rolling Mill Co.

**SHEETS, STEEL, SHOVEL.**  
Universal Rolling Mill Co.

**SHEETS, STEEL, SIDING.**  
American Sheet & Tin Plate Co.

**SHEETS, STEEL, SPECIAL.**  
American Sheet & Tin Plate Co.

**SHEETS, TINNING.**  
Canonsburg Steel & Iron Co.

**SHELLAC, IMITATION.**  
Brazilian Turpentine Co.

**SHELLAC, PURE, IN COLORS.**  
Brazilian Turpentine Co.

**SHELLS, BOILER, MARINE, WELDED.**  
Scaife, William B. & Sons Co.

**SHELLS, REFILLABLE CARTRIDGE FUSE.**  
Daum, A. F. Co. ("Daum.")

**SHELLS, TANK.**  
Scaife, William B. & Sons Co.

**SHELVES, DISPLAY FOR STORES ALL KINDS.**  
McLean, William B. Mfg. Co.

**SHELVES, GLASS.**  
Opalite Tile Co. (For all purposes.)

**SHELVES, PLATE GLASS.**  
American Mirror Works.

**SHELVES, WOOD MANTEL.**  
Commercial Sash & Door Co.

**SHIELDS, AUTOMOBILE WIND.**  
Banker Wind Shield Co.  
Consumers Auto Supply Co.  
Duquesne Auto Parts Co.  
Pittsburgh Auto Equipment Co.

**SHIELDS, BULLET PROOF STEEL.**  
Crucible Steel Co.

**SHIELDS, FURNACE.**  
Standard Sheet Metal Mfg. Co.

**SHIELDS, RADIATOR.**  
Pressed Radiator Co.

**SHIELDS, STEEL, BULLET PROOF.**  
Crucible Steel Co.

**SHIMS,**  
Lanz, M. & Son.

**SHINGLES, ASBESTOS PROTECTED METAL.**  
Asbestos Protected Metal Co.

**SHINGLES, WOOD.**  
Commercial Sash & Door Co.  
Edgecomb, W. H. & Sons.

**SHIPS, STEEL.**  
Reese, James & Sons.  
Riter-Conley Mfg. Co.

**SHIRTS.**  
Deidrick, George H.  
Ferguson, H. B. (Men's working and dress.)  
Ferguson & Hene.  
Harvard Custom Shirt Co.  
Patent Garment & Mfg. Co. (Mill and sateen.)  
Rauh Bros. Co.

**SHOES, BRAKE.**  
Coshocton Iron Co.  
Pittsburgh Brake Shoe Co.  
Pittsburgh Iron & Steel Foundries Co.

**SHOES, EXTENSION FOR CRIPPLES.**  
Pittsburgh Orthopedic Co.

**SHOES, PILE.**  
Patterson, W. W. Co.  
Pittsburgh Block & Mfg. Co.

**SHOT, CHILLED STEEL.**  
Pittsburgh Crushed Steel Co.

**SHOT, ROLLS OF, FOR REPEATING CAP PISTOLS.**  
Pittsburgh Cap Pistol Co., The.

**SHOVELS, BAKERS' HAND.**  
Hussey-Biuns Shovel Co.

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| <b>SHOVELS, BRICK, HAND.</b><br>Hubbard & Co.  | <b>SIGNALS, BLOCK SYSTEM.</b><br>Union Switch & Signal Co.   |
| <b>SHOVELS, CLAY, HAND.</b><br>Hubbard & Co.   | <b>SIGNALS, ELECTRIC WRAILAY.</b><br>Union Switch & Signal Co.<br>Westinghouse Electric & Mfg. Co.         |
| <b>SHOVELS, COAL, HAND.</b><br>Hardsocg, Martin Co.<br>Hubbard & Co.<br>Hussey-Binns Shovel Co. (Steel.)<br>Russell, J. C. Shovel Co.  | <b>SIGNALS, ENAMELED IRON RAILWAY.</b><br>Ingram-Richardson Mfg. Co.                                       |
| <b>SHOVELS, CONTRACTORS'.</b><br>Hussey-Binns Shovel Co.<br>Pittsburgh Shovel Co.  | <b>SIGNALS, INTERLOCKING SYSTEM.</b><br>Union Switch & Signal Co.  |
| <b>SHOVELS, HAND.</b><br>Ames Shovel & Tool Co. (All kinds.)<br>Hardsocg, Martin Co. (Coal.)<br>Hubbard & Co.<br>Hussey-Binns Shovel Co.<br>Pittsburgh Shovel Co.<br>Russell, J. C. Shovel Co. (All kinds iron.) | <b>SIGNALS, JUNCTION.</b><br>Union Switch & Signal Co.   |
| <b>SHOVELS, MINING.</b><br>Hussey-Binns Shovel Co.   | <b>SIGNALS, SWITCH.</b><br>Ingram-Richardson Mfg. Co.<br>Union Switch & Signal Co.                         |
| <b>SHOVELS, MINING MACHINE.</b><br>Hubbard & Co.<br>Pittsburgh Shovel Co.  | <b>SIGNS, ADVERTISING.</b><br>Bailey & Thompson Co.<br>Ingram-Richardson Mfg. Co.                          |
| <b>SHOVELS, MOULDERS' HAND.</b><br>Hubbard & Co.<br>Pittsburgh Shovel Co.  | <b>SIGNS, ALL METAL.</b><br>Jones, A. E. Co.   |
| <b>SHOVELS, ORE HAND.</b><br>Hubbard & Co.   | <b>SIGNS, BRASS.</b><br>Matthews, James H. & Co.<br>Weber-Erickson-Bunting Co.<br>Pannier Bros. Stamp Co.  |
| <b>SHOVELS, POLE AND POST HOLE HAND.</b><br>Hubbard & Co.<br>Pittsburgh Shovel Co.   | <b>SIGNNS, BRONZE.</b><br>Matthews, James H. & Co.   |
| <b>SHOVELS, SNOW.</b><br>Hubbard & Co.<br>Pittsburgh Shovel Co.  | <b>SIGNS, BULLETIN BOARD.</b><br>Jones, A. E. Co.  |
| <b>SHOWERS.</b><br>National Tube Co.<br>Standard Sanitary Mfg. Co. (Brass.)  | <b>SIGNS, COMMERCIAL.</b><br>Pannier Bros. Stamp Co. (Of metal.)   |
| <b>SHRINES, CHURCH.</b><br>Kittanning Church Seating Co.   | <b>SIGNS, ELECTRIC.</b><br>Dawes, John L. Co., The. (Glass.)<br>Jones, A. E. Co.                           |
| <b>SHROUDS, AUTOMOBILE.</b><br>Keystone Sheet Metal Co.  | <b>SIGNS, ENAMELED.</b><br>Ingram-Richardson Mfg. Co.<br>Pannier Bros. Stamp Co.<br>Standard Sign Mfg. Co. |
| <b>SHUTTERS, FIRE PROOF.</b><br>Keystone Fire Door Co.<br>Rasner & Dinger Co.  | <b>SIGNS, FACTORY.</b><br>Ingram-Richardson Mfg. Co.   |
| <b>SHUTTERS, HARDWOOD AND PINE.</b><br>Eiler Lumber & Mill Co.   | <b>SIGNS, GLASS.</b><br>Dawes, John L. Co., The.   |
| <b>SHUTTERS, IRON.</b><br>Hanny, Charles G. & Co.<br>Watt Mfg. Co.   | <b>SIGNS, ILLUMINATED GLASS.</b><br>Jones, A. E. Co.   |
| <b>SIDEBOARDS, FOR STORES OF ALL KINDS.</b><br>McLean, William B. Mfg. Co.   | <b>SIGNS, IRON TABLET.</b><br>Tyler, W. S. Co., The.   |
| <b>SIDING, ELEVATOR.</b><br>Scaife, William B. & Sons Co.  | <b>SIGNS, LETTERS FOR.</b><br>Opalite Tile Co.   |
| <b>SIDING, WOOD.</b><br>Edgecomb, W. H. & Sons.  | <b>SIGNS, STREET NAME.</b><br>Ingram-Richardson Mfg. Co.   |
| <b>SIGNALS, AUTOMATIC MECHANICAL.</b><br>Union Switch & Signal Co.   | <b>SIGNS, WAGON.</b><br>Ingram-Richardson Mfg. Co.   |
|  | <b>SIGNS, WINDOW.</b><br>Bailey & Thompson Co.   |
|  | <b>SIGNS, WIRE.</b><br>Colditz, McMinn & Co.<br>Rieger Iron & Wire Works.<br>Taylor & Dean.                |

**SILK, ELECTRIC INSULATING.**  
Pittsburgh Insulating Co.

**SILLS, CONCRETE WINDOW AND DOOR.**  
Concrete Products Co.

**SILVERSMITHS.**  
Grogan & Co.  
Heeren Bros. Co.

**SINGLETREES.**  
Diamond Forging & Mfg. Co.

**SINKS, ENAMELED IRON.**  
Iron City Sanitary Mfg. Co.  
McVay & Walker. (Cast.)  
Standard Sanitary Mfg. Co.  
United States Sanitary Mfg. Co.

**SINKS, KITCHEN.**  
McVay & Walker. (Enameled.)  
United States Sanitary Mfg. Co.

**SINKS, PANTRY.**  
American Porcelain Co.

**SINKS, PORCELAIN.**  
American Porcelain Co.

**SINKS, RECESS.**  
Standard Sanitary Mfg. Co.

**SINKS, SLOP.**  
Iron City Sanitary Mfg. Co.  
McVay & Walker.  
Standard Sanitary Mfg. Co.  
United States Sanitary Mfg. Co.

**SINKS, STEEL.**  
Glockler, Bernard Co.

**SINKS, TIN.**  
Glockler, Bernard Co.

**SINKS, WASH.**  
Standard Sanitary Mfg. Co.

**SKIFFS, ALL KINDS.**  
Price, R. C. & Co.

**SKIMMERS.**  
Dunlap, John Co. (Enameled flat.)  
McCullough-Dalzell Crucible Co.

**SKINS, CALF AND HOG.**  
Pennsylvania Hide & Leather Co.

**SKIPS, MINE.**  
Riter-Conley Mfg. Co.

**SKYLIGHTS, COPPER.**  
Pittsburgh Cornice & Roofing Co.  
Scholes Bros.

**SKYLIGHTS, GALVANIZED.**  
Scholes Bros.

**SKYLIGHTS, IRON.**  
Irwin, Thomas W. Mfg. Co. (Structural.)  
Pittsburgh Cornice & Roofing Co.  
Standard Sheet Metal Mfg. Co.

**SKYLIGHTS, METALLIC.**  
Acme Cornice, Skylight & Roofing Co.  
Irwin, Thomas W. Mfg. Co.  
Rasner & Dinger Co.  
Standard Sheet Metal Mfg. Co.

**SKYLIGHTS, SHEET METAL.**

Angermyer, W. F. Co.  
Keighley, S. Metal Ceiling Mfg. Co.  
McCombs, William P. Co.

**SLABS, STEEL.**

Carnegie Steel Co.  
Pittsburgh Steel Co.  
Republic Iron & Steel Co.  
Universal Rolling Mill Co. (Plow.)

**SLEDGES, BLACKSMITH.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Verona Tool Works.

**SLEDGES, BLOCK MAKERS'.**

Iron City Tool Works.

**SLEDGES, COAL.**

Gerber, L. & Son.  
Hardscoog, Martin Co.  
Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Verona Tool Works.

**SLEDGES, HEAVY.**

Crucible Steel Co.  
Western Tool & Forge Co.

**SLEDGES, LIMESTONE.**

Iron City Tool Works.

**SLEDGES, MINING.**

Gerber, L. & Sons.

**SLEDGES, ORE MINERS'.**

Iron City Tool Works.

**SLEDGES, PEIN AND FLAT FACE STONE.**

Iron City Tool Works. (Blunt or sharp.)

**SLEDGES, STONE.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Verona Tool Works.

**SLEDGES, TURNING, HORSE SHOERS'.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Verona Tool Works.

**SLEDS, OAK.**

Penn Wheelbarrow Co.

**SLEEVES, DREDGING, RUBBER.**

Pennsylvania Rubber Co.

**SLEEVES, LADLE, PLUMBAGO.**

McCullough-Dalzell Crucible Co.

**SLEEVES, RIVER.**

Etna Forging Co.

**SLIDES, TOBOGGAN.**

Harton, T. N. Co.

**SMELTERS, ENAMEL.**

Pittsburgh Clay Pottery Co.

**SOAP, CHIP.**

Old Honesty Soap Mfg. Co.

**SOAP, CRACKER JACK, IN JARS.**

Marine Oil Co.

**SOAP, CONCRETE WATER PROOFING.**  
Strunz, S. & Sons.

**SOAP, DRY CLEANERS.**  
Strunz, S. & Sons.

**SOAP, LAUNDRY.**  
Hasley, George & Son.  
Old Honesty Soap Mfg. Co.  
Schaffer, John L. & Bro. ("White  
Lilly.")  
Staab, G.  
Strunz, S. & Sons.  
Walker, W. & H.

**SOAP, LINSEED OIL.**  
Strunz, S. & Sons.

**SOAP, LIQUID ANTISEPTIC.**  
Pittsburgh Fluid Co.

**SOAP, LIQUID TOILET.**  
Strunz, S. & Sons.

**SOAP, SHAVING.**  
Old Honesty Soap Mfg. Co.

**SOAP, SOFT.**  
Schaffer, John L. & Bro. ("White  
Lilly.")  
Walker, W. & H.

**SOAP, SPECIAL.**  
Strunz, S. & Sons.

**SOAP, TOILET.**  
Old Honesty Soap Mfg. Co.  
Strunz, S. & Sons. (Liquid.)  
Walker, W. & H.

**SOAPSTONE.**  
McCormack, J. S. Co.

**SOCKETS, PUMP ROD.**  
National Tube Co.

**SOCKETS, SUCKER ROD.**  
Masseth Packer & Machine Co.

**SODA, ARSENATE.**  
Pennsylvania Salt Mfg. Co.

**SODA, ASH.**  
Pennsylvania Salt Mfg. Co.

**SODA, BI-CARBONATE, FOR BAKING AND  
DRUG PURPOSES.**  
Pennsylvania Salt Mfg. Co.

**SODA, CAUSTIC.**  
Columbia Chemical Co.  
Pennsylvania Salt Mfg. Co.

**SODA, CLUB, "POLAR."**  
Water Delivery Co.

**SODA, LAUNDRY.**  
Pennsylvania Salt Mfg. Co.

**SODA, SAL.**  
Pennsylvania Salt Mfg. Co.

**SOLDER.**  
Crucible Steel Co. of America. (Silver.)  
Katz, Max & Son.  
Pittsburgh Smelting & Refining Co.  
(Bar and wiping.)  
Pittsburgh White Metal Co.  
National Lead & Oil Co.

**SOFTENERS, WATER.**  
Seife, William B. & Sons Co.

**SOLVENTS, PAINT.**  
Barrett Mfg. Co. (All kinds.)

**SPADES, DIAMOND POINT.**  
Hubbard & Co.

**SPADES, DIGGING, HAND.**  
Hussey-Binn Shovel Co. (Iron.)

**SPADES, DITCHING.**  
Hubbard & Co.  
Pittsburgh Shovel Co.

**SPADES, DRAIN.**  
Hubbard & Co.  
Pittsburgh Shovel Co.

**SPADES, GARDEN.**  
Hubbard & Co.  
Pittsburgh Shovel Co.

**SPADES, GRAFTING.**  
Hubbard & Co.

**SPADES, MISCELLANEOUS.**  
Ames Shovel & Tool Co.

**SPADES, POST HOLE.**  
Hubbard & Co.  
Hussey-Binn Shovel Co.  
Pittsburgh Shovel Co.

**SPADES, SPECIAL.**  
Ames Shovel & Tool Co.

**SPECTROSCOPES, ALL KINDS.**  
Brashear, John A. Co.

**SPECTROSCOPES AND SPECTROGRAPHS**  
Brashear, John A. Co. (Astronomical.)

**SPELTER.**  
Pittsburgh Smelting & Refining Co.

**SPIKES, BARGE.**  
Dilworth, Porter & Co.

**SPIKES, BOAT.**  
Dilworth, Porter & Co.  
Jones & Laughlin Steel Co.  
Lanz, M. & Son.

**SPIKES, BRIDGE.**  
Oliver Iron & Steel Co.  
Pittsburgh Rivet Co.  
Republic Iron & Steel Co.

**SPIKES, COPPER.**  
Hussey, C. G. & Co.

**SPIKES, COUNTERSUNK.**  
Lanz, M. & Son.

**SPIKES, DOCK.**  
Dilworth, Porter & Co.  
Jones & Laughlin Steel Co.  
Lanz, M. & Son.  
Oliver Iron & Steel Co.  
Pittsburgh Rivet Co.  
Republic Iron & Steel Co.

**SPIKES, MARLINE.**  
Dilworth, Porter & Co.

**SPIKES, RAILROAD SCREW.**  
Oliver Iron & Steel Co.  
Pittsburgh Forge & Iron Co.

**SPIKES, RAILROAD TRACK.**

Dilworth, Porter & Co.  
 Jones & Laughlin Steel Co.  
 Oliver Iron & Steel Co.  
 Republic Iron & Steel Co.  
 Severance, S. Mfg. Co.

**SPIKES, SHIP.**

Dilworth, Porter & Co.  
 Jones & Laughlin Steel Co.  
 Lanz, M. & Son.  
 Oliver Iron & Steel Co.  
 Pittsburgh Rivet Co.  
 Republic Iron & Steel Co.

**SPIKES, WHARF.**

Dilworth, Porter & Co.

**SPINDLES, CLAMP.**

Gem Mfg Co.

**SPINDLES, WOOD.**

Edgecomb, W. H. & Sons.

**SPINNING.**

Adams Bros. Mfg. Co.

**SPLICERS, ELECTRIC CABLE.**

Westinghouse Electric & Mfg. Co.

**SPLICES, RAIL.**

Carnegie Steel Co.  
 Jones & Laughlin Steel Co.  
 Republic Iron & Steel Co.

**SPOONS, DIGGING, POST HOLE.**

Ames Shovel & Tool Co.  
 Hubbard & Co.  
 Hussey-Binns Shovel Co.  
 Pittsburgh Shovel Co.  
 Russell, J. C. Shovel Co.

**SPOONS, ENAMELED BASTING.**

Dunlap, John Co.

**SPOUTS, OILER, ALL KINDS AND FINISHES.**

Gem Mfg. Co.

**SPRAYER, AIR TIGHT POWER.**

Air Tight Steel Tank Co.

**SPRINGS, AGRICULTURAL.**

American Spiral Spring & Mfg. Co.  
 Crucible Steel Co.  
 Duer Spring & Mfg. Co.  
 Pittsburgh Spring & Steel Co.  
 Union Spring & Mfg. Co.

**SPRINGS, AIR BRAKE.**

Pittsburgh Spring & Steel Co.

**SPRINGS, ALL SIZES, SHAPES AND STYLES.**

Duer Spring & Mfg. Co.  
 Greater Pittsburgh Spring Co.

**SPRINGS, AUTOMOBILE.**

American Spiral Spring & Mfg. Co.  
 Duer Spring & Mfg. Co.  
 Fort Pitt Spring & Mfg. Co.  
 Iron City Spring Co.  
 Liggett Spring & Axle Co.

**SPRINGS, BUFFER.**

American Spiral Spring & Mfg. Co.  
 Duer Spring & Mfg. Co.

**SPRINGS, BED.**

American Spiral Spring & Mfg. Co.  
 Fort Pitt Bedding Co.  
 Pittsburgh-Hickson Co.  
 Pittsburgh Iron Folding Bed Co.  
 Union Spring & Mfg. Co.  
 Victor Spring Bed Co. (Woven wire  
 and National.)

**SPRINGS, BUGGY.**

Duer Spring & Mfg. Co.  
 Liggett Spring & Axle Co.  
 Union Spring & Mfg. Co. (Boot.)

**SPRINGS, CAR.**

American Spiral Spring & Mfg. Co.  
 Duer Spring & Mfg. Co.  
 Fort Pitt Spring & Mfg. Co.  
 Iron City Spring Co.  
 Pittsburgh Spring & Steel Co.  
 Railway Steel Spring Co.

**SPRINGS, CAR FENDER.**

Fort Pitt Spring & Mfg. Co.

**SPRINGS, CARRIAGE.**

American Spiral Spring & Mfg. Co.  
 Iron City Spring Co.  
 Duer Spring & Mfg. Co.  
 Union Spring & Steel Co. (Baby.)

**SPRINGS, CHANNELER, RUBBER.**

Pennsylvania Rubber Co.

**SPRINGS, COIL CAR.**

Union Spring & Mfg. Co.  
 Duer Spring & Mfg. Co.  
 Pittsburgh Spring & Mfg. Co.

**SPRINGS, COMPRESSION.**

Duer Spring & Mfg. Co.  
 Fort Pitt Spring & Mfg. Co.  
 Union Spring & Mfg. Co.  
 Crucible Steel Co.

**SPRINGS, CUSHION BACK.**

Union Spring & Mfg. Co.

**SPRINGS, DERRICK.**

Duer Spring & Mfg. Co.  
 Union Spring & Mfg. Co.

**SPRINGS, DOOR.**

Union Spring & Mfg. Co.

**SPRINGS, DRAFT.**

Union Spring & Mfg. Co.

**SPRINGS, ELLIPTIC CAR.**

Fort Pitt Spring & Mfg. Co.  
 Railway Steel Spring Co.  
 Pittsburgh Spring & Steel Co.  
 Union Spring & Mfg. Co.

**SPRINGS, ENGINE.**

American Spiral Spring & Mfg. Co.  
 Duer Spring & Mfg. Co.

**SPRINGS, EXERCISER.**

Union Spring & Mfg. Co.

**SPRINGS, EXTENSION.**

Crucible Steel Co.

**SPRINGS, FURNITURE.**

American Spiral Spring & Mfg. Co.

**SPRINGS, GOVERNOR.**

Union Spring & Mfg. Co.

**SPRINGS, GREASE CUP.**  
Union Spring & Mfg. Co.

**SPRINGS, GUN.**  
Duer Spring & Mfg. Co.  
Union Spring & Mfg. Co.

**SPRINGS, HINGE.**  
Duer Spring & Mfg. Co.  
Fort Pitt Spring & Mfg. Co.  
Union Spring & Mfg. Co.  
American Spiral Spring & Mfg. Co.

**SPRINGS, JIG.**  
Duer Spring & Mfg. Co.  
Union Spring & Mfg. Co.

**SPRINGS, LEAF COIL.**  
Pittsburgh Spring & Steel Co.

**SPRINGS, LOCK.**  
American Spiral Spring & Mfg. Co.

**SPRINGS, LOCOMOTIVE.**  
Crucible Steel Co. (Eliptic, full or half.)  
Union Spring & Mfg. Co.

**SPRINGS, MACHINERY.**  
American Spiral Spring & Mfg. Co.  
Fort Pitt Spring & Mfg. Co.  
Duer Spring & Mfg. Co.  
Pittsburgh Spring & Steel Co.  
Union Spring & Mfg. Co.

**SPRINGS, OIL TEMPERED.**  
Iron City Spring Co.

**SPRINGS, ORGAN.**  
American Spiral Spring & Mfg. Co.

**SPRINGS, FOR RAILROAD CARS, ALL KINDS.**  
Fort Pitt Spring & Mfg. Co.

**SPRINGS, RAILWAY.**  
Union Spring & Mfg. Co.

**SPRINGS, RECTANGULAR SECTIONAL STEEL.**  
Fort Pitt Spring & Mfg. Co.

**SPRINGS, ROCKER.**  
American Spiral Spring & Mfg. Co.  
Duer Spring & Mfg. Co.

**SPRINGS, RUBBER CAR AND VEHICLE.**  
Pennsylvania Rubber Co.

**SPRINGS, SASH.**  
Union Spring & Mfg. Co.

**SPRINGS, SCALE.**  
Duer Spring & Mfg. Co.  
Union Spring & Mfg. Co.

**SPRINGS, SEAT.**  
American Spiral Spring & Mfg. Co.  
Duer Spring & Mfg. Co.  
Union Spring & Mfg. Co.

**SPRINGS, SPECIAL.**  
American Spiral Spring & Mfg. Co.  
Duer Spring & Mfg. Co.  
Union Spring & Mfg. Co.

**SPRINGS, SPIRAL.**  
American Spiral Spring & Mfg. Co.  
Pittsburgh Spring & Steel Co.  
Union Spring & Mfg. Co.

**SPRINGS, TORSION.**  
Fort Pitt Spring & Mfg. Co.

**SPRINGS, TRACE.**  
American Spiral Spring & Mfg. Co.

**SPRINGS, TROLLEY.**  
American Spiral Spring & Mfg. Co.  
Crucible Steel Co.  
Duer Spring & Mfg. Co.  
Pittsburgh Spring & Steel Co.  
Union Spring & Mfg. Co.  
Fort Pitt Spring & Mfg. Co.

**SPRINGS, TRUCK.**  
Duer Spring & Mfg. Co.  
Iron City Spring Co.

**SPRINGS, VALVE.**  
American Spiral Spring & Mfg. Co.  
Union Spring & Mfg. Co.

**SPRINGS, VANADIUM.**  
American Vanadium Co.

**SPRINGS, VEHICLE.**  
Liggett Spring & Axle Co.  
Pennsylvania Rubber Co. (Rubber.)

**SPRINGS, WAGON.**  
American Spiral Spring & Mfg. Co.  
Duer Spring & Mfg. Co.  
Iron City Spring Co.  
Liggett Spring & Axle Co.

**SPRINGS, WIRE.**  
Crucible Steel Co.

**SPRINGS, WIRE ALL KINDS FOR.**  
Page Woven Wire Fence Co.

**SPRINGS, WOVEN WIRE.**  
Pittsburgh Iron Folding Bed Co. (Bed.)  
Victor Spring Bed Co. (Bed.)

**SPUDS.**  
Fawcett Machine Co.

**SQUEEZERS, PUDDLE BALL.**  
Garrison, A. Foundry Co.  
Lewis Foundry & Machine Co.  
United Engineering & Foundry Co.

**SQUEEZERS, ROTARY MILL.**  
Garrison, A. Foundry Co.

**STACKS, SMOKE.**  
Carlin's, Thomas Sons Co. (Steel.)  
Collins, Frank.  
Homestead Iron Works Co. (Iron.)  
Long, Walter Mfg. Co.  
Munroe, R. & Son.  
McNeil, James & Bro. (Iron and steel.)  
Oil Well Supply Co. (Steel.)  
Riter-Conley Mfg. (Iron and steel.)  
Scaife, William B. & Sons Co.  
Standard Sheet Metal Mfg. Co.  
Treadwell Construction Co. (Steel.)

**STAINS, VARNISH.**  
Atlas Paint Co.  
Eagle Paint & Varnish Co.  
Globe Varnish Co.  
Lawrence, W. W. Co.  
Nevin, T. H. Co.  
Painter, Joel T.  
Wheeler, Henry & Son.

**STAINS, SHINGLE.**

Atlas Paint Co.  
Nevin, T. H. Co.

**STAIRS, IRON, ORNAMENTAL.**

Albree, Chester B. Iron Works.  
Colditz & McMinn.  
Hanny, Charles G. & Co.  
Homestead Iron Works Co.  
Keystone Ornamental Iron Co.  
Kratzer, W. N. & Co.  
Pittsburgh Structural Steel Co.  
Reiling Mfg. Co.  
Rieseck, P.  
Sommerville Iron & Bronze Co.  
Taylor & Dean.  
Tyler, W. S. Co., The.  
Vilsack, Martin Co.  
Watt Mfg. Co.

**STAIRS, WOOD.**

Eiler Lumber & Mill Co.  
Miller, William & Sons.  
Wilkinsburg Stair & Mfg. Co.

**STALLS, CLOSET.**

Standard Sanitary Mfg. Co.

**STALLS, URINAL.**

Standard Sanitary Mfg. Co.

**STAMPING, AUTOMOBILE, IN STEEL.**

Standard Steel Box Co.

**STAMPING, METAL.**

Allegheny Steel Co. (Sheet.)  
Emerson-Smith & Co. (Iron.)  
Forster, J. C. & Son.  
Hoerle, W. M.  
McCombs, William P Co.  
Wolverine Supply & Mfg. Co. (For sheet.)

**STAMPS, FIGURE.**

Cunningham, M. E. Co.

**STAMPS, RUBBER.**

Matthews, James H. & Co.  
Matthews, James H. & Co.  
Pannier Bros. Stamp Co.  
Weber-Erickson-Bunting Co.

**STAMPS, STEEL.**

Buechele & Davis.  
Cunningham, M. E. Co. (For letters.)  
Matthews, James H. & Co.  
Pannier Bros. Stamp Co.

**STANDS, BOILER RANGE.**

Standard Sanitary Mfg. Co.

**STANDS, FLOOR.**

Jones & Laughlin Steel Co.

**STANDS, FLOWER, IRON AND WIRE.**

Rieger Iron & Wire Works.

**STANDS, GAS LOG.**

Superior Mfg. Co. ("Superior.")

**STANDS, GLASS CAKE.**

Co-operative Flint Glass Co.

**STANDS, INK, PRESSED GLASS.**

McKee Glass Co.

**STANDS, LAMP, HAMMERED BRASS.**

Semmer, Phillip Co.

**STANDS, PULLEY.**

Jones & Laughlin Steel Co.

**STANDS, SWITCH.**

Union Switch & Signal Co.

**STANDS, UMBRELLA, WEATHED OAK.**

Penn Wheelbarrow Co.

**STANDS, URN.**

Demmler & Schenck Co.

**STAPLES, COOPERAGE.**

Townsend, C. C. & E. P.

**STAPLES, HARNESS HAME.**

Oliver Iron & Steel Co.

**STAPLES, WAGON BOX.**

Oliver Iron & Steel Co.

**STAPLES, WIRE.**

Pittsburgh Steel Co.

**STARTERS, ELECTRIC MOTOR.**

Westinghouse Electric & Mfg. Co.

**STAYBOLTS, ADJUSTABLE CROWN.**

Flannery Bolt Co.

**STAYBOLTS, RADIAL FLEXIBLE.**

Flannery Bolt Co.

**STAYBOLTS, TATE FLEXIBLE.**

Flannery Bolt Co.

**STAYS, CHAIN.**

Standard Chain Co.

**STAYS, ROLLER.**

McKinney Mfg. Co.

**STEEL, ACID.**

Carbon Steel Co.  
Sterling Steel Foundry Co.  
Vulcan Crucible Steel Co. (Open hearth.)

**STEEL, ALLOY.**

Braeburn Steel Co.

Carnegie Steel Co.

Jessop Steel Co. (For metal cutting saws.)

Pittsburgh Steel Co.

Pittsburgh Tool Steel Wire Co.

Vulcan Crucible Steel Co.

**STEEL, ANGLES.**

Jones & Laughlin Steel Co.

Lockhart Iron & Steel Co.

Pittsburgh Steel Co.

Republic Iron & Steel Co.

**STEEL, AUTOMOBILE.**

Crucible Steel Co.

Jessop Steel Co. (Alloy.)

Superior Steel Co. (Strip.)

**STEEL, AXE.**

Colonial Steel Co.

Lockhart Iron & Steel Co.

Oliver Iron & Steel Co.

**STEEL, BAR.**

American Bridge Co.

Bethlehem Steel Co.

Braeburn Steel Co.

Brown & Co.

Carnegie Steel Co.

Colonial Steel Co.

Crucible Steel Co.

Jones & Laughlin Steel Co.

**STEEL, BAR.**

Lockhart Iron & Steel Co.  
Oliver & Snyder Steel Co.  
Oliver Iron & Steel Co.  
Pittsburgh Steel Co.  
Republic Iron & Steel Co.

**STEEL, BESSEMER.**

Carnegie Steel Co.  
Jones & Laughlin Steel Co.  
Pittsburgh Steel Co.

**STEEL, BIT.**

Pittsburgh Steel Mfg. Co.

**STEEL, BLACK.**

Zug Iron & Steel Co. (Sheet.)

**STEEL, BLOCK.**

Crucible Steel Co.

**STEEL, BLUE ANNEALED.**

West Penn Steel Co.

**STEEL, BOILER.**

Carnegie Steel Co.  
Jones & Laughlin Steel Co.  
Pittsburgh Steel Co.

**STEEL, CARBON.**

Carbon Steel Co. (High grade.)  
Carnegie Steel Co.  
Crucible Steel Co.  
Firth-Sterling Steel Co.  
Pittsburgh Steel Co.  
Pittsburgh Cold Rolled Steel Co.  
Vulcan Crucible Steel Co. (Tool.)

**STEEL, CHARCOAL.**

Early, W. J. & Son. (Chilled.)

**STEEL, CHROME.**

Union Drawn Steel Co. (Cold drawn.)

**STEEL, COLD DRAWN.**

Columbia Steel Shafting Co.  
Globe Wire Co. (Tool.)  
Jones & Laughlin Steel Co.  
Kidd Bros. & Burgher Tool Steel Wire Co.  
Pittsburgh Tool Steel Wire Co.  
Union Drawn Steel Co. (Chrome, nickel and vanadium.)

**STEEL, COLD FINISHED.**

Columbia Steel Shafting Co.

**STEEL, COLD PRESSED.**

Columbia Steel Shafting Co.  
Pittsburgh Steel Co.

**STEEL, COLD ROLLED.**

Columbia Steel Shafting Co.  
Crucible Steel Co.  
Morris & Bailey Co. (Strip.)  
Republic Iron & Steel Co.  
Superior Steel Co. (Strip.)  
West Penn Steel Co. (One, two and three pass.)  
Pittsburgh Cold Rolled Steel Co.

**STEEL, CRUCIBLE.**

Braeburn Steel Co.  
Brown & Co.  
Colonial Steel Co.  
Crucible Steel Co.  
Jessop Steel Co.  
Universal Rolling Mills.  
Vulcan Crucible Steel Co.

**STEEL, CORRUGATED.**

Zug Iron & Steel Co. (Sheets.)

**STEEL, CRUSHED.**

Pittsburgh Crushed Steel Co.

**STEEL, DENTAL.**

Pittsburgh Tool Steel Wire Co.

**STEEL, DIE, GROOVED GRIP FOR BOLT MACHINES.**

Kidd Bros. & Burgher Tool Steel Wire Co.

**STEEL, DIE, ROUND HEADER.**

Kidd Bros. & Burgher Tool Steel Wire Co.

**STEEL, ELECTRIC.**

Crucible Steel Co.

**STEEL FLATS.**

Carnegie Steel Co.  
Jones & Laughlin Steel Co.  
Lockhart Iron & Steel Co.  
Pittsburgh Steel Co.  
Pittsburgh Cold Rolled Steel Co.

**STEEL, GALVANIZED.**

Zug Iron & Steel Co. (Sheets.)

**STEEL, GUN BARREL.**

Crucible Steel Co.

**STEEL, HALF OVAL.**

Lockhart Iron & Steel Co.

**STEEL, HEXAGON.**

Lockhart Iron & Steel Co.

**STEEL, HOOP.**

Carnegie Steel Co.  
Pittsburgh Steel Co.

**STEEL, JAIL BAR.**

Crucible Steel Co.

**STEEL, JAR.**

Crucible Steel Co.

**STEEL MACHINERY.**

Braeburn Steel Co.  
Crucible Steel Co.  
Pittsburgh Steel Co.  
Vulcan Crucible Steel Co.

**STEEL, NICKEL.**

Carbon Steel Co.  
Crucible Steel Co.  
Pittsburgh Steel Co.  
Union Drawn Steel Co. (Cold drawn.)  
Vulcan Crucible Steel Co.

**STEEL, OPEN HEARTH.**

Carnegie Steel Co.  
Colonial Steel Co.  
Crucible Steel Co.  
Jones & Laughlin Steel Co.  
Pittsburgh Steel Co.  
Sterling Steel Foundry Co.  
Universal Rolling Mills.  
West Penn Steel Co.

**STEEL, PICKLED.**

West Penn Steel Co.

**STEEL, PISTON ROD, COLD DRAWN.**

Union Drawn Steel Co.

**STEEL, PLATE.**

American Bridge Co. (Bridge.)  
 Carnegie Steel Co.  
 Des Moines Bridge & Iron Works.  
 Crucible Steel Co.  
 Independent Bridge Co.  
 Jones & Laughlin Steel Co.  
 Pittsburgh Steel Co.  
 Republic Iron & Steel Co.

**STEEL, ROLLED SHEET.**

Allegheny Steel Co. (For electrical purposes.)  
 American Sheet & Tin Plate Co.  
 Columbia Steel Shafting Co.  
 Crucible Steel Co.  
 Jones & Laughlin Steel Co.  
 Pittsburgh Cold Rolled Steel Co.  
 Pittsburgh Steel Co.  
 Republic Iron & Steel Co.  
 Universal Rolling Mills.  
 Impervious Sheet Steel Co.

**STEEL, ROUND EDGE.**

Lockhart Iron & Steel Co.

**STEEL, SHEET.**

Allegheny Steel Co. (For metal furniture.)  
 Carnegie Steel Co.  
 Crucible Steel Co.  
 Duquesne Steel Foundry Co.  
 American Sheet & Tin Plate Co.  
 JESSOP Steel Co. (For cutlery and springs.)  
 Jones & Laughlin Steel Co.  
 Oliver Iron & Steel Co.  
 Pittsburgh Cold Rolled Steel Co.  
 Pittsburgh Steel Co.  
 Republic Iron & Steel Co.  
 Universal Rolling Mill Co.  
 Zug Iron & Steel Co. (black gal. and corrugated.)

**STEEL, SIDING.**

American Sheet & Tin Plate Co.  
 Zug Iron & Steel Co.

**STEEL, SOFT CENTER.**

Colonial Steel Co.

**STEEL, STRIP, HOT AND COLD ROLLED.**

Morris & Bailey Co.  
 West Leechburg Steel Co.

**STEEL, STRUCTURAL.**

American Bridge Co.  
 Bollinger-Andrews Const. Co.  
 Independent Bridge Co.  
 Jones & Laughlin Steel Co.  
 Lockhart Iron & Steel Co.  
 McClintic-Marshall Construction Co.  
 Penn Bridge Co.  
 Republic Iron & Steel Co.

**STEEL, TOOL.**

Braeburn Steel Co.  
 Colonial Steel Co.  
 Crucible Steel Co.  
 Damascus Tool Steel Co.  
 Firth-Sterling Steel Co.  
 Globe Wire Co.  
 Lockhart Iron & Steel Co.  
 Oliver Iron & Steel Co.  
 Pittsburgh Cold Rolled Steel Co.  
 Vulcan Crucible Steel Co.

**STEEL, TUNGSTEN.**

Pittsburgh Tool Steel Wire Co.

**STEEL, U BAR.**

Republic Iron & Steel Co.

**STEEL, VANADIUM.**

Crucible Steel Co.  
 Pittsburgh Tool Steel Wire Co.  
 Union Drawn Steel Co.  
 Vanadium Metals Co.

**STEELS, FABRICATED.**

American Bridge Co.  
 Bollinger-Andrews Const. Co.  
 Mackintosh-Hemphill & Co.  
 McClintic-Marshall Construction Co.  
 Des Moines Bridge & Iron Co.  
 Penn Bridge Co.

**STEMS, GASOLINE MOTOR VALVE.**

Crescent Forgings Co.  
 Standard Gauge Steel Co.

**STEMWARE, GLASS.**

Duncan & Miller Glass Co.  
 Fry, H. C. Glass Co.  
 United States Glass Co.

**STENCILS.**

Cunningham, M. E. & Co.  
 Matthews, James H. & Co.  
 Pannier Bros. Stamp Co.  
 Weber-Erickson-Bunting Co.

**STEPS, MARBLE AND GRANITE.**

Stewart, James C.

**STEPS, POLE.**

Lanz, M. & Son.  
 Oliver Iron & Steel Co.  
 Pittsburgh Block & Mfg. Co.  
 Republic Iron & Steel Co.

**STEPS, SEWER OR MANHOLE.**

Lanz, M. & Son.

**STILLS, COPPER WHISKEY.**

Stender Coppersmith Co., The.

**STILLS, OIL.**

Carroll-Porter Boiler & Tank Co.  
 Rheam, S. B.  
 Riter-Conley Mfg. Co.  
 Scaife, William B. & Sons Co.  
 Treadwell Construction Co.

**STILLS, TAR.**

Riter-Conley Mfg. Co.  
 Treadwell Construction Co.

**STOGIES.**

Crescent Cigar Co.  
 Duquesne Cigar Co., The.  
 Jenkinson, R. & W. Co.  
 Pollack Stogie Co.

**STOKERS, CHAIN GRATE.**

Coshocton Iron Co.  
 Rosedale Foundry & Machine Co.  
 (Mechanical.)

**STOKERS, MECHANICAL.**

Rosedale Foundry & Machine Co.  
 (Chain grate.)  
 Westinghouse Machine Co.

**STONE, BRIDGE.**

Clydesdale Stone Co.

**STONE, BUILDING, CUT.**

Carnegie Brick & Stone Co.  
 Clydesdale Stone Co.  
 Bryan, Frank.  
 Goettel Bros.  
 Iron City Brick & Stone Co.  
 Raisig, Charles.  
 Weinman Bros.  
 West End Stone & Brick Co.

**STONE, CRUSHED.**

Consolidated Stone & Mining Co.

**STONE, CURB.**

Clydesdale Stone Co.  
 Concrete Products Co. (Protected concrete.)  
 New Kensington Stone Co.

**STONE, GRANITE.**

Booth & Flinn, Ltd.

**STONE, GRAVE.**

Stone Rough Box & Grave Stone Co.

**STONE, RED LIME.**

Clydesdale Stone Co.

**STONE, RUBBLE.**

Clydesdale Stone Co.  
 New Kensington Stone Co.  
 Ward, John H. & Sons Co.

**STONE, SAND.**

Clydesdale Stone Co.  
 Consolidated Stone & Mining Co.  
 New Kensington Stone Co.  
 Ward, John H. & Son.

**STONE, SILICA.**

New Kensington Stone Co.

**STONEWARE SPECIALTIES.**

American Glass Specialty Co.  
 Sherwood Bros. Co. (Jars, jugs, etc.)

**STOPPERS, BEER BOTTLE.**

Enterprise Stamping Co.

**STOPPERS, BOTTLE, RUBBER.**

Pennsylvania Rubber Co.

**STOPPERS, CORK.**

Armstrong Cork Co.

**STOPPERS, LADLE, PLUMBAGO.**

McCullough-Daizell Crucible Co.

**STOPPERS, LITHIA WATER BOTTLE.**

Enterprise Stamping Co.

**STOPS, CORK.**

Armstrong Cork Co.

**STOVES, COAL.**

Howard Stove Co.  
 Olive Stove Works. (All kinds.)  
 Stove & Range Co. of Pittsburgh. (All kinds.)

**STOVES, DRYING, PLASTERERS'.**

Carlin's, Thomas Sons Co.

**STOVES, FUEL.**

Superior Mfg. Co.

**STOVES, GAS.**

Adams Bros. Mfg. Co.  
 Adler, H. Co.  
 Bash, John C.  
 Howard Stove Co.  
 Lawson Mfg. Co.  
 Marvel Burner & Mfg. Co. (Fire-place.)  
 Olive Stove Works. (All kinds.)  
 Penn Burner & Plating Co. (Heating.)  
 Stove & Range Co. of Pittsburgh. (All kinds.)  
 Superior Mfg. Co.

**STOVES, HEATING.**

Lawson Mfg. Co. (Natural or artificial.)  
 Penn Burner & Plating Co. (Gas.)

**STOVES, HOT BLAST FOR FURNACES.**

Riter-Conley Mfg. Co.

**STRAIGHTENERS, ANGLE.**

Carlin's, Thomas Sons Co.  
 Lewis Foundry & Machine Co.

**STRAIGHTENERS, BEAM.**

Lewis Foundry & Machine Co.

**STRAIGHTENERS, CHANNEL.**

Lewis Foundry & Machine Co.

**STRAIGHTENERS, FOR FLATS, SQUARES, ETC.**

Lewis Foundry & Machine Co.

**STRAIGHTENERS, PIPE.**

United Engineering & Foundry Co.

**STRAIGHTENERS, RAIL.**

Lewis Foundry & Machine Co.

**STRAINERS, PIPE.**

Pittsburgh Meter Co.

**STRAINERS, SINGLE, TWIN AND MULTIPLE.**

Elliott Co.

**STRAINERS, SINK.**

Standard Sanitary Mfg. Co. (All kinds.)

**STRAINERS, WATER.**

Rosedale Foundry & Machine Co.

**STRAPS, ANCHOR.**

Lanz, M. & Son.

**STRAPS, BAGGAGE.**

Kamin, Henry.

**STRAPS, BEAM.**

Steel City Electric Co.

**STRAPS, DROP FORGED END GATE.**

Diamond Forging & Mfg. Co.

**STRAPS, LEATHER, BAGGAGE, SHAWL AND TRUNK.**

Kamin, Henry.

**STRAPS, PIPE.**

Kelly & Jones Mfg. Co.

Wall, P. Mfg. & Supply Co.

**STRAPS, POLE.**

Lanz, M. & Son.

**STRAPS, SHAWL.**

Capitol Trunk & Bag Co.  
Kamin, Henry.

**STRAPS, SINGLETREE.**

Diamond Forging & Mfg. Co. (Drop forged.)  
Oliver Iron & Steel Co. (Iron and steel.)

**STRAPS, TRUNK.**

Capitol, Trunk & Bag Co.  
Kamin, Henry.

**STRETCHERS, CURTAIN.**

Acme Mfg. Co.  
Wagner Curtain Stretcher Co.

**STRETCHERS, WIRE.**

Page Woven Wire Fence Co.

**STRIPPERS, INGOT.**

Taylor-Wilson Mfg. Co. (Hydraulic.)  
United Engineering & Foundry Co.

**STRIPS, WEATHER.**

National Metal Weatherstrip Co.

**STRUCTURAL STEEL.**

Bollinger-Andrews Construction Co.  
Des Moines Bridge & Iron Works.  
Fort Pitt Bridge Works.  
Jones & Laughlin Steel Co.  
McClintic-Marshall Construction Co.

**STUDS, BRASS.**

Pittsburgh Screw & Bolt Co.

**STUDS, ELECTRIC FIXTURE.**

Steel City Electric Co.

**STUDS, MACHINE.**

Pittsburgh Screw & Bolt Co.

**STUFFERS, SAUSAGE.**

Gloekler, Bernard Co.

**SUPERHEATERS, STEAM.**

Westinghouse Machine Co.

**SUPPLIES, CHEMISTS' AND BACTERIOLOGICAL.**

Scientific Materials Co.

**SUPPLIES, CLAY, GLASS MANUFACTURERS'.**

Willets Co., The.

**SUPPLIES, DRILL.**

Brennen Drilling Co., J. A.

**SUPPLIES, GLASS FURNACE.**

Willets Co., The.

Woods-Lloyd Co.

**SUPPLIES, INCANDESCENT GAS.**

Hipwell Mfg. Co.

**SUPPLIES, PHARMACEUTICAL.**

Pittsburgh Physicians Supply Co.

**SUPPLIES, POULTRY.**

Klingler, H. J. & Co.

**SUPPLIES, RAILROAD.**

Dilworth-Porter Co.

**SUPPLIES, TOOL, PNEUMATIC.**

Tuckey Bros.

**SUPPLIES, UNDERTAKERS.**

National Casket Co.  
Pittsburgh Fluid Co.  
United States Casket Co.

**SUPPLIES, WELL.**

Brennen, J. A. Drilling Co.  
Evans Mfg. Co., The. (Oil.)  
Masset Packer & Machine Co. (All kinds.)  
Oil Well Supply Co. (All kinds.)

**SUPPORTS, INSULATOR.**

Steel City Electric Co.  
Westinghouse Electric & Mfg. Co.

**SWAGES, BLACKSMITHS' TOP AND BOTTOM.**

Iron City Tool Works.  
Klein-Logan Co.

**SWAGES, COLLAR.**

Iron City Tool Works.

**SWAGES, CUSHION TIRE.**

Iron City Tool Works.

**SWAGES, SAW.**

Ajax Mfg. Co.  
Emerson-Smith & Co.

**SWAGES, TIN PLATE.**

Hubbard & Co.

**SWAGES, TOE CALK.**

Iron City Tool Works.

**SWEEPERS, CARPET.**

Electric Renovator Mfg. Co. (Electric.)  
Hutchison Electric Carpet Sweeper Co.

**SWINGS, PORCH.**

Greensburg Swing Co.  
Penn Wheelbarrow Co.

**SWITCHBOARDS, ELECTRIC LIGHT AND POWER.**

Doubleday-Hill Electric Co.  
Pittsburgh Electrical & Machine Works.  
Westinghouse Electric & Mfg. Co.

**SWITCHES, ELECTRIC, ALL KINDS.**

Westinghouse Electric & Mfg. Co.

**SWITCHES, PORTABLE, RAILROAD.**

Orenstein, Arthur Koppel Co.

**SWITCHES, RAILROAD INTERLOCKING.**

Union Switch & Signal Co.

**SWITCHES, RAILROAD SIGNALING.**

Union Switch & Signal Co.

**SYNCHROSCOPES.**

Westinghouse Electric & Mfg. Co.

**SYPHONS, STEAM GAUGE.**

National Tube Co.

**SYRUP.**

Duff, P. & Sons.

**SYSTEMS, ELECTRIC LIGHTING.**

Westinghouse Electric & Mfg. Co.

**SYSTEMS, OIL PUMPING.**

Tate-Jones & Co.

**TABLES, BANK.**

Kates &amp; Co.

**TABLES, CHURCH COMMUNION.**

Kittanning Church Seating Co.

**TABLES, CUTTING, FOR WINDOW GLASS CUTTERS.**

Klages, George W. (Complete.)

**TABLES, EXTENSION.**

Diamond Mattress Co.

**TABLES, FEED, ROLLING MILL.**

Fawcett Machine Co.

Garrison, A. Foundry Co.

Mackintosh-Hemphill &amp; Co.

Mesta Machine Co.

Taylor-Wilson Mfg. Co.

United Engineering &amp; Foundry Co.

**TABLES, KITCHEN.**

Diamond Mattress Co.

**TABLES, MILL.**

Mesta Machine Co.

United Engineering &amp; Foundry Co.

**TABLES, MILL, ROLLING.**

Fawcett Machine Co.

Garrison, A. Foundry Co.

Mackintosh-Hemphill &amp; Co.

Taylor-Wilson Mfg. Co.

**TABLES, SPACING.**

Gillespie Mfg. Co.

**TABLES, STEAM.**

Demmler &amp; Schenk Co.

Gloekler, Bernard Co.

**TABLES, TILTING.**

Garrison, A. Foundry Co.

United Engineering &amp; Foundry Co.

**TABLES, TRANSFER.**

Garrison, A. Foundry Co.

**TABLES, TRAVELING.**

United Engineering &amp; Foundry Co.

**TABLETS, BRASS.**

Matthews, James H. &amp; Co.

McKenna Bros. Brass Co.

**TABLETS, BRONZE.**

Matthews, James H. &amp; Co.

McKenna Bros. Brass Co.

Pannier Bros. Stamp Co.

Sommerville Iron &amp; Bronze Co.

Tyler, W. S. Co., The.

**TABLETS, DRUGGISTS'.**

Ideal Specialty Co., The.

**TABLETS, HEADACHE.**

Hollander Bros. Drug Co.

**TABLETS, IRON.**

Tyler, W. S. Co., The.

**TABLEWARE, SEMI-PORCELAIN.**

Canonsburg Pottery Co.

**TACKS, ALL KINDS.**

American Steel &amp; Wire Co.

**TACKS, COOPERS'.**

Walsh, Morris Sons.

**TACKS, RUBBER HEAD.**

Pennsylvania Rubber Co.

**TAGS, BAG.**

Capitol Trunk &amp; Bag Co.

**TAGS, LICENSE (Dog, Wagon, Bicycle).**

Pannier Bros. Stamp Co.

**TAGS, PRICE.**

National Tag &amp; Mfg. Co.

**TAGS, SHIPPING.**

Pannier Bros. Stamp Co. (Foreign.)

**TALLOW.**

Abbott Packing Co.

Dunlevy &amp; Bro.

Fried &amp; Reineman.

Kuhn, F. J.

Mardorf, C. &amp; Sons.

Monongahela Melting Co.

Pennsylvania Hide &amp; Tallow Co.

Peters Packing Co.

Pittsburgh Provision &amp; Packing Co.

Rea &amp; Co.

Seiler, John Co.

**TAMPERS, COMBINATION SCRAPERS AND.**

Hubbard &amp; Co.

**TAMPERS, DIRT.**

Duff Mfg. Co.

Turner, C. A., Inc.

Charleroi Foundry &amp; Machine Co.

**TAMPERS, SEWER AND TRENCH.**

Duff Mfg. Co.

**TAMPERS, SOD.**

Duff Mfg. Co.

**TANKS, ACID.**

Munroe, R. &amp; Son.

Scaife, William B. &amp; Sons Co.

**TANKS, AIR.**

Modern Water Supply Co.

Munroe, R. &amp; Son.

Riter-Conley Mfg. Co.

Scaife, William B. &amp; Sons Co.

**TANKS, AIR COMPRESSOR.**

Air Tight Steel Tank Co. (Pump equipment.)

Westinghouse Machine Co.

National Tube Co.

**TANKS, CAR.**

Munroe, R. &amp; Son.

**TANKS, CLOSET.**

McVay &amp; Walker. (Enameled.)

Standard Sanitary Mfg. Co.

Flush Tank Meter Co. (Flush.)

**TANKS, FACTORY.**

Munroe, R. &amp; Son.

Scaife, William B. &amp; Sons Co.

**TANKS, FISH, GLASS.**

Co-operative Flint Glass Co.

**TANKS, GAS.**

Munroe, R. &amp; Son.

**TANKS, GAS ENGINE COOLING.**

Riter-Conley Mfg. Co.

**TANKS, GASOLINE.**

Air Tight Steel Tank Co. (Underground storage.)  
Modern Water Supply Co.  
Munroe, R. & Son.

**TANKS, GLASS HOUSE.**

Dixon, H. L. Co.

**TANKS, GRAIN ELEVATOR.**

Munroe, R. & Son.

**TANKS, IRON.**

Carroll-Porter Boiler & Tank Co.  
Duff Mfg. Co.  
Homestead Iron Works Co.  
Lappan, James Mfg. Co.  
Munroe, R. & Son.  
McNeil, James & Bro. Co.  
Porter Foundry & Machine Co.  
Treadwell Construction Co.

**TANKS, OIL STORAGE.**

Carroll-Porter Boiler & Tank Co.  
Pittsburgh Gage & Supply Co.  
Munroe, R. & Son.  
Rheam, S. B.  
Riter-Conley Mfg. Co.  
Sands Mfg. Co.  
Wall, P. Mfg. & Supply Co.

**TANKS, PRESSURE.**

Air Tight Steel Tank Co. (Air.)  
Scaife, William B. & Sons Co.

**TANKS, SODA WATER.**

Munroe, R. & Son.

**TANKS, STEEL.**

Air Tight Steel Tank Co. (Welded and brazed.)  
Carroll-Porter Boiler & Tank Co.  
Des Moines Bridge & Iron Works.  
Duff Mfg. Co.  
Lappan, James Mfg. Co.  
Munroe, R. & Son.  
McNeil, James & Bro. Co.  
Penn Bridge Co.  
Sands Mfg. Co.  
Porter Foundry & Machine Co.  
Treadwell Construction Co.

**TANKS, STORAGE, OIL.**

Munroe, R. & Son.  
Rheam, S. B.  
Riter-Conley Mfg. Co.  
Sands Mfg. Co. (Steel.)  
Wall, P. Mfg. & Supply Co.

**TANKS, TAR.**

Munroe, R. & Son.

**TANKS, URINAL, FLUSHING.**

Standard Sanitary Mfg. Co.

**TANKS, WATER.**

Air Tight Steel Tank Co. (Pneumatic system.)  
Des Moines Bridge & Iron Works.  
Modern Water Supply Co. (House supply.)  
Munroe, R. & Son.

**TANKS, WOOD.**

Elsessor, A. Bros.

**TAPES, INSULATING.**

Pennsylvania Rubber Co. (Rubber.)  
Pittsburgh Insulating Co. (Electrical.)  
Standard Underground Cable Co.  
Westinghouse Electric & Mfg. Co.

**TAPS, CORK.**

Armstrong Cork Co.

**TAPS, PIPE.**

Standard Engineering Co.

**TAR, COAL.**

McClintock & Irvine.

**TARPAULINS, WATERPROOF.**

Brown & Co.  
Chapman, A. B.  
Dreesen, William.  
Liberty Awning Co.  
Pittsburgh Awning Co.  
Pittsburgh Waterproof Co.  
Mamaux Awning & Tent Co.

**TAXIMETERS, IMPROVED TYPE.**

Pittsburgh Taximeter Co.

**TEES, AMMONIA.**

Kelly & Jones Mfg. Co., The.

**TEES, BRANCH PIPE.**

Kelly & Jones Mfg. Co., The.  
National Tube Co.

**TEES, BRASS.**

Kelly & Jones Mfg. Co., The.  
National Tube Co.

**TEES, DRAINAGE.**

Kelly & Jones Mfg. Co., The.

**TEES, ECCENTRIC.**

National Tube Co.

**TEES, FOUR WAY.**

National Tube Co.

**TEES, IRON.**

Carnegie Steel Co.  
Eichleay, John Jr., Co. (Structural.)  
Kelly & Jones Mfg. Co., The. (Cast and malleable.)  
National Tube Co. (Malleable.)  
Oliver Iron & Steel Co. (Structural.)

**TEES, RAILING.**

Kelly & Jones Mfg. Co., The.

**TEES, REDUCING.**

National Tube Co.

**TEES, SEMI-STEEL.**

Kelly & Jones Mfg. Co., The.

**TEES, STEEL FOR STRUCTURAL WORK.**

Carnegie Steel Co.  
Eichleay, John Jr., Co.  
Oliver Iron & Steel Co.

**TEETH, BUNDLE CARRIER.**

National Tube Co.

**TEETH, HARROW.**

Lanz, M. & Son.  
Oliver Iron & Steel Co.  
Pittsburgh Rivet Co. (Round or square.)  
Republic Iron & Steel Co.

|                                   |  |
|-----------------------------------|--|
| TEETH, HAY LOADER.                | TIES, CHAIN CATTLE.  |
| American Spiral Spring & Mfg. Co. | Standard Chain Co.   |
| TEETH, MINING MACHINE.            | TIES, COLUMN, FOR CONCRETE WORK.                           |
| Oliver Iron & Steel Co.           | Electric Welding Co.                                       |
| TEETH, THRESHING MACHINE.         | TIES, COTTON.  |
| Oliver Iron & Steel Co.           | Carnegie Steel Co.<br>Pittsburgh Steel Co.                 |
| TELEPHONES.                       | TIES, CROSS.   |
| Hipwell Mfg. Co.                  | Carnegie Steel Co. (Steel.)                                |
| TELESCOPES.                       | TIES, IRON, RAILROAD.                                      |
| Capitol Trunk & Bag Mfg. Co.      | Carnegie Steel Co.   |
| Grossman, S. & Co.                | Jones & Laughlin Steel Co.                                 |
| United Suit Case Co.              | Pittsburgh Steel Co.                                       |
| Boyd, Boyd & Boyd Trunk Co.       | Pittsburgh Steel Foundry Co.                               |
| TELESCOPES, ASTRONOMICAL.         | TIES, RAILROAD, IRON AND STEEL.                            |
| Brashear, John A. Co.             | Carnegie Steel Co.   |
| TELESCOPES, EQUATORIAL.           | Jones & Laughlin Steel Co.                                 |
| Brashear, John A. Co.             | Pittsburgh Steel Co.                                       |
| TELESCOPES, PHOTOGRAPHIC.         | Pittsburgh Steel Foundry.                                  |
| Brashear, John A. Co.             |  |
| TELESCOPES, REFLECTING.           | TIES, RAILROAD, WOOD.                                      |
| Brashear, John A. Co.             | Mead & Speer.  |
| TELESCOPES, REPEATING.            | TIES, WALL.  |
| Brashear, John A. Co.             | Keystone Wire Matting Co.                                  |
| TEMPLES, FLANGE DRILLING.         | McDowell, J. G. Co.  |
| National Tube Co.                 | Page Woven Wire Fence Co. (Wire.)                          |
| TENDERS, LOCOMOTIVE.              | TIGHTENERS, BELT.  |
| Pressed Steel Car Co.             | Jones & Laughlin Steel Co.                                 |
| TENTS.                            | TILE, ART.   |
| Brown & Co.                       | Opalite Tile Co.   |
| Brown, W. S. Co.                  |  |
| Dreesen, William.                 | TILE, CERAMIC.   |
| Mamaux Awning & Tent Co.          | Star Encaustic Tile Co.                                    |
| Palace Folding Tent Co.           |  |
| Pittsburgh Awning Co.             | TILE, COKE OVEN.   |
| TERMINALS, ELECTRIC.              | Union Sewer Pipe Co.                                       |
| Westinghouse Electric & Mfg. Co.  |  |
| TERMINALS, TELEGRAPH.             | TILE, CORK FLOOR.  |
| Standard Underground Cable Co.    | Armstrong Cork Co.   |
| TERMINALS, TELEPHONE.             | TILE, DRAIN.   |
| Standard Underground Cable Co.    | Pittsburgh-Buffalo Co.                                     |
| TERNE PLATE, FOR ROOFING.         | TILE, EMBOSSED.  |
| Standard Tin Plate Co.            | Beaver Falls Art Tile Co.                                  |
| TERRA COTTA.                      | TILE, ENAMELED.  |
| National Fire Proofing Co.        | Beaver Falls Art Tile Co.                                  |
| White, Scott A. (Architectural.)  | Strengel Bros. Co. (Metal.)                                |
| THERMOSTATS.                      | TILE, ENCAUSTIC.   |
| Robertshaw Mfg. Co.               | Star Encaustic Tile Co.                                    |
| Standard Heating & Radiator Co.   |  |
| (Automobile.)                     | TILE, FIREPROOFING.  |
| Stupakoff, S. H.                  | Monongahela Clay Mfg. Co.                                  |
| THIMBLES, ROPE.                   | Sankey Bros. (Hollow.)                                     |
| Lanz, M. & Son. (Guy and wire.)   | Ward, John H. & Sons Co.                                   |
| Oliver Iron & Steel Co.           |  |
| TIERCES, WOOD, FOR GLASSWARE,     | TILE, FLOOR.   |
| MEAT, GLUE, ETC.                  | Armstrong Cork Co. (Cork.)                                 |
| Walsh, Morris Co.                 | Pennsylvania Rubber Co. (Rubber.)                          |
| TIES, BALE, FOR BALING.           | TILE, GLASS.   |
| Griswold Wire Co.                 | Opalite Tile Co. (For theaters, banks,<br>buildings, etc.) |
|                                   | Pittsburgh Plate Glass Co.                                 |
| TIES, HOLLOW.                     | TILE, HOLLOW.  |
|                                   | Lanz, M. & Son.  |
|                                   | Monongahela Clay Mfg. Co.                                  |
|                                   | Sankey Bros. (Fireproofing.)                               |
|                                   | Manown Mfg. Co. (Arch locomotive.)                         |

**TILE, INTERLOCKING RUBBER.**

Pennsylvania Rubber Co.

 **TILE, LOCOMOTIVE.**

Manown Mfg. Co. (Hollow arch.)

 **TILE, METAL, ENAMELED.**

Stengel Bros. Co.

 **TILE, OPALITE.**

Opalite Tile Co.

 **TILE, PLAIN ENAMEL.**

Beaver Falls Art Tile Co.

 **TILE, ROOFING.**

American Sewer Pipe Co.

 **TILE, RUBBER, INTERLOCKING.**

Pennsylvania Rubber Co.

 **TILE, VITREOUS.**

Star Encaustic Tile Co.

 **TILE, WALL.**

Beaver Falls Art Tile Co.

 **TIMBER, STEEL MINE.**

Carnegie Steel Co.

Pittsburgh Steel Co.

 **TIN, BAR.**

Pittsburgh White Metal Co.

 **TIN, BLOCK.**

National Lead &amp; Oil Co.

 **TIN, PHOSPHORIZED.**

Damascus Bronze Co.

 **TIN, PIG.**

Pittsburgh White Metal Co.

 **TIN, ROOFING.**American Sheet & Tin Plate Co.  
Canonsburg Sheet & Iron Works. **TIN, SHEET, BRIGHT.**

Canonsburg Sheet &amp; Iron Works.

 **TIN, WORKERS IN SHEET.**Kossler, William & Sons.  
O'Leary, J. B.  
McIlroy, J. D. & Son. **TINNING OF ALL KINDS OF CASTINGS.**

Gloekler, Bernard Co.

 **TIN PLATE.**Alcania Co. The.  
American Sheet & Tin Plate Co.  
(Bright.)  
Canonsburg Iron & Steel Works.  
Dilworth, Porter & Co.  
Ferguson Tin Plate Co.  
Griffiths Charcoal Iron Mills.  
McKeesport Tin Plate Co. (Black,  
sheet scrap.)  
Standard Tin Plate Co. (Coke and  
charcoal.)  
Washington Tin Plate Co. **TINWARE.**Knorr, W. L. (For bakers' use.)  
Pittsburgh Tinware Mfg. Co.  
Wall, P. Mfg. & Supply Co. **TIPPLES, COAL MINE.**

Eichleay, John Jr., Co.

Heyl &amp; Patterson.

Kratzer, W. N. &amp; Co. (Steel.)

McClinic-Marshall Construction Co.

Penn Bridge Co.

Phillips Mine and Mill Supply Co.

Pittsburgh Conveying Machinery Co.

Scaife, William B. &amp; Sons Co.

 **TIPPLES, ORE HANDLING.**

Heyl &amp; Patterson.

 **TIPPLES, STEEL FOR MINING.**

Kratzer, W. N. &amp; Co.

 **TIPS, RUBBER, CHAIR LEG, CRUTCH AND SCREW.**

Pennsylvania Rubber Co.

 **TIRES, AEROPLANE, RUBBER.**

Pennsylvania Rubber Co.

 **TIRES, AUTOMOBILE, RUBBER.**

Pennsylvania Rubber Co.

 **TIRES, CARRIAGE, STEEL.**

Jones &amp; Laughlin Steel Co.

 **TIRES, MOTOR CYCLE.**

Pennsylvania Rubber Co.

 **TIRES, STEEL.**Carnegie Steel Co.  
Crucible Steel Co.  
Jones & Laughlin Steel Co.  
Oliver Iron & Steel Co.  
Pittsburgh Steel Co. **TIRES, WAGON, STEEL.**Jones & Laughlin Steel Co.  
Oliver Iron & Steel Co. **TOASTERS, BREAD.**Dunlap, John Co.  
Pittsburgh Tinware Mfg. Co.

Wilson Mfg. Co.

 **TOBACCO, SCRAP, FOR SMOKING OR CHEWING.**

Frietsch, Charles B. &amp; Bro.

 **TONGS, BLACKSMITHS'.**

Iron City Tool Works.

 **TONGS, CLEANOUT.**

Pittsburgh Brass Mfg. Co.

 **TONGS, PIPE.**

Oil Well Supply Co.

 **TONGS, RAIL.**Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.  
Verona Tool Works. **TONGS, RAIL TIE.**

Iron City Tool Works.

 **TOOLS, BAKERS'.**

Knorr, W. L.

 **TOOLS, BEADING.**

Turner, C. A., Inc.

 **TOOLS, BLACKSMITHS'.**

Crucible Steel Co.

Iron City Tool Works.

**TOOLS, BRICKLAYERS'.**

Buechele & Davis.  
Crucible Steel Co.

**TOOLS, BUTCHERS'.**

Gloekler, Bernard Co.

**TOOLS, CALKING.**

Iron City Tool Works.  
Turner, C. A., Inc.

**TOOLS, CONFECTIONERS'.**

Knorr, W. L.

**TOOLS, CONTRACTORS'.**

Carlin Machinery & Supply Co.

**TOOLS, COOPERS'.**

Iron City Tool Works.

**TOOLS, DRAINAGE.**

Ames Shovel & Tool Co.

**TOOLS, DRILLING.**

Heeter, C. M. & Sons Co. (Oil well.)  
Kesselman & Co. (Oil well.)  
Keystone Driller Co.  
National Supply Co.

**TOOLS, FIRING.**

Turner, C. A., Inc.

**TOOLS, FISHING, WELL.**

Heeter, C. M. & Sons Co.  
Kesselman & Co.  
National Supply Co.  
Tillinghast, B. D.

**TOOLS, GLASS CUTTERS'.**

Klages, G. W.

**TOOLS, GLASS HOUSE.**

Dixon, H. L. Co.  
Leng, Charles.

**TOOLS, MARBLE WORKERS'.**

Buechele & Davis.  
Tuckey Bros.

**TOOLS, MASON'S.**

Buechele & Davis.  
Crucible Steel Co.  
Hubbard & Co.

**TOOLS, MINERS'.**

Duquesne Tool Mfg. Co.  
Hardsocg, Martin & Co.  
Crucible Steel Co.  
Turner, C. A., Inc.

**TOOLS, MINING.**

Crucible Steel Co.

**TOOLS, PNEUMATIC.**

Carron, A. M. & Co.  
Tuckey Bros.

**TOOLS, PORTABLE.**

Liberty Mfg. Co.

**TOOLS, ROLL TURNING.**

Garrison, A. Foundry Co.  
Tretheway, Samuel Co.

**TOOLS, SPECIAL, SMALL.**

Austin Tool & Machine Co.

**TOOLS, STONE CUTTERS'.**

Buechele & Davis.  
Heathcote, Thomas.  
Hubbard & Co.  
Tuckey Bros.

**TOOLS, STAYBOLT, FOR APPLYING TATE FLEXIBLE.**

Flannery Bolt Co.

**TOOLS, TRACK.**

Crucible Steel Co.  
Hubbard & Co.  
Iron City Tool Works.  
Jones & Laughlin Steel Co.  
Klein-Logan Co.  
Oliver Iron & Steel Co.  
Verona Tool Works.

**TOOLS, TRUING, COMMUTATOR.**

Westinghouse Electric & Mfg. Co.

**TOOLS, WELL.**

Heeter, C. M. & Sons Co. (Oil.)  
Kesselman & Co. (Oil.)  
Keystone Driller Co.  
Masset Packer & Machine Co. (Oil,  
gas and artesian.)  
National Supply Co.  
Tillinghast, B. D. (Fishing.)

**TOPS, AUTOMOBILE CAPE.**

Thompson, E. J. Co.

**TOPS, BOTTLE.**

Crescent Bottle Co. (Sprinkler and  
powder.)  
Collins & Wright. (Metal.)

**TOPS, DESK, GLASS.**

American Mirror Works. (Plate.)  
Opalite Tile Co.

**TOPS, FURNITURE, GLASS.**

American Mirror Works.

**TOPS, GLASS.**

American Mirror Works. (Desk and  
furniture.)  
Crescent Bottle Co. (Bottle.)  
Opalite Tile Co. (Table, counter, desk  
and scale.)

**TOPS, METAL, FOR SALT AND PEPPER SHAKERS.**

Collins & Wright.

**TORCHES, BLOW.**

McClintock & Irvine. (Kerosene.)  
Wall, P. Mfg. & Supply Co. (Brazed  
steel.)

**TORCHES, BROAD TOP.**

Gem Mfg. Co.  
Sands Mfg. Co.

**TORCHES, CAMP.**

Sands Mfg. Co.

**TORCHES, CAR INSPECTORS'.**

Gem Mfg. Co.

**TORCHES, COPPERIZED.**

Wall, P. Mfg. & Supply Co.

**TORCHES, ENGINEERS'.**

Gem Mfg. Co.  
Wall, P. Mfg. & Supply Co.

**TORCHES, FACTORY.**  
Gem Mfg. Co.  
Wall, P. Mfg. & Supply Co.

**TORCHES, GASOLINE.**  
Gem Mfg. Co.

**TORCHES, HEAVY BRAZED STEEL.**  
Gem Mfg. Co.  
Sands Mfg. Co.  
Wall, P. Mfg. & Supply Co.

**TORCHES, KEROSENE BLOW.**  
McClintock & Irvine.

**TORCHES, LIGHTING.**  
Wall, P. Mfg. & Supply Co.

**TORCHES, LOCOMOTIVE.**  
Gem Mfg. Co.  
Wall, P. Mfg. & Supply Co.

**TORCHES, OIL.**  
Gem Mfg. Co.

**TORCHES, PYRAMID.**  
Gem Mfg. Co.  
Sands Mfg. Co.

**TORCHES, RAILROAD HAND.**  
Sands Mfg. Co.

**TORCHES, RED FIRE CAMPAIGN.**  
Versailles Railway Signal Co.

**TORPEDOES, RAILWAY SIGNAL TRACK.**  
Versailles Railway Signal Co.

**TOWERS, COAL AND ORE.**  
Milholland, J. & J. B.  
Riter-Conley Mfg. Co.

**TOWERS, IRON.**  
Riter-Conley Mfg. Co.  
Scaife, William B. & Sons Co.

**TOWERS, OBSERVATORY.**  
Kratzer, W. N. & Co.

**TOWERS, STEEL.**  
Eichleay, John Jr., Co.  
Riter-Conley Mfg. Co.  
Scaife, William B. & Sons Co.

**TOWERS, TANK.**  
Riter-Conley Mfg. Co.  
Scaife, William B. & Sons Co.

**TOWERS, TRANSMISSION.**  
Eichleay, John Jr., Co. (Steel.)  
Kratzer, W. N. & Co.  
Riter-Conley Mfg. Co.

**TOWERS, WATER.**  
Des Moines Bridge & Iron Works.  
Munroe, R. & Son.  
Penn Bridge Co.  
Pittsburgh Bridge & Iron Works.  
Scaife, William B. & Sons Co.

**TOWERS, WIRELESS.**  
Kratzer, W. N. & Co.

**TOYS, MECHANICAL.**  
Wolverine Supply & Mfg. Co.

**TRACK ACCESSORIES.**  
Carnegie Steel Co.

**TRACK MATERIALS.**  
Carnegie Steel Co.

**TRACKS, DOOR.**  
McKinney Mfg. Co.

**TRACKS, INDUSTRIAL.**  
Orenstein, Arthur Koppel Co.

**TRACKS, OVERHEAD CARRYING.**  
Scaife, William B. & Sons Co.

**TRACKS, PORTABLE.**  
Orenstein, Arthur Koppel Co.

**TRAINERS, WIRE OR IRON VINE.**  
Rieger Iron & Wire Works.

**TRAINS, ROLL.**  
Garrison, A. Foundry Co.

**TRAMWAYS, ELECTRIC.**  
Westinghouse Electric & Mfg. Co.

**TRANSFORMERS, CONSTANT CURRENT AND POTENTIAL.**  
Westinghouse Electric & Mfg. Co.

**TRANSFORMERS, ELECTRIC BELL RING-ING.**  
Goettman, O. J.

**TRANSFORMERS, ELECTRIC CABLE TESTING.**  
Westinghouse Electric & Mfg. Co.

**TRANSFORMERS, LOW VOLTAGE FOR ALL PURPOSES.**  
Goettman, O. J.

**TRANSFORMERS, OIL INSULATED.**  
Pittsburgh Transformer Co.

**TRANSFORMERS, POWER.**  
Pittsburgh Transformer Co.

**TRANSFORMERS, SELF COOLED.**  
Pittsburgh Transformer Co.

**TRANSFORMERS, SIGN.**  
Westinghouse Electric & Mfg. Co.

**TRANSFORMERS, SWITCHBOARD.**  
Westinghouse Electric & Mfg. Co.

**TRANSMISSION, TURBINE.**  
Fawcett Machine Co.

**TRAPPERS, COUPLING.**  
United Engineering & Foundry Co.

**TRAPS, BASIN.**  
National Lead & Oil Co. (Lead.)  
Standard Sanitary Mfg. Co.

**TRAPS, BATH.**  
National Lead & Oil Co. (Lead.)  
Standard Sanitary Mfg. Co.

**TRAPS, BEAR, FOR RIVER IMPROVEMENTS.**  
Kratzer, W. N. & Co.

**TRAPS, DRAINAGE.**  
Kelly & Jones Mfg. Co., The.  
National Tube Co.

**TRAPS, DRUM.**  
Standard Sanitary Mfg. Co.

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| <b>TRAPS, FISH.</b><br>Pittsburgh Meter Co.  | <b>TROUGHES, COPPER EAVES.</b><br>Hussey, C. G. & Co.  |
| <b>TRAPS, GREASE.</b><br>Standard Sanitary Mfg. Co.  | <b>TRUCKS, AUTOMOBILE.</b><br>Beckert, William. (Bodies.)<br>Braddock Machine Co.<br>Parr Wagon Co.<br>Lange Motor Car Co.<br>Standard Motor Truck Co. (Gasoline.) |
| <b>TRAPS, LAVATORY.</b><br>Standard Sanitary Mfg. Co.  | <b>TRUCKS, BARREL.</b><br>McKinney Mfg. Co.  |
| <b>TRAPS, LEAD.</b><br>National Lead & Oil Co.   | <b>TRUCKS, FACTORY.</b><br>Keystone Wire Matting Co. (Handy<br>hard wood.)<br>McKinney Mfg. Co.  |
| <b>TRAPS, SEWER GAS.</b><br>National Tube Co.<br>Standard Sanitary Mfg. Co.  | <b>TRUCKS, FOUNDRY.</b><br>Jones & Laughlin Steel Co.  |
| <b>TRAPS, SINK.</b><br>Standard Sanitary Mfg. Co.  | <b>TRUCKS, HOTEL.</b><br>Keystone Wire Matting Co. (Handy<br>hard wood.)   |
| <b>TRAPS, STEAM.</b><br>Elliott Co.<br>Gillespie Mfg. Co.<br>Golden-Anderson Valve Specialty Mfg.<br>Co.<br>Kelly & Jones Mfg. Co., The.<br>McAuley Automatic Trap Co. (High<br>and low pressure.)<br>Williams Gauge Co. | <b>TRUCKS, INGOT.</b><br>Jones & Laughlin Steel Co.  |
| <b>TRAPS, URINAL.</b><br>Standard Sanitary Mfg. Co.  | <b>TRUCKS, LOGGING, ELECTRIC.</b><br>Westinghouse Electric & Mfg. Co.  |
| <b>TRAYS, CAKE AND CANDY, GLASS.</b><br>Co-operative Flint Glass Co.   | <b>TRUCKS, MINE CAR.</b><br>Phillips Mine & Mill Supply Co.  |
| <b>TRAYS, COMB AND BRUSH.</b><br>Standard Sanitary Mfg. Co.  | <b>TRUCKS, MOTOR.</b><br>Pittsburgh Machine Tool Co.<br>Pressed Steel Car Co. (For electric<br>cars.)  |
| <b>TRAYS, LAUNDRY.</b><br>United States Sanitary Mfg. Co.  | <b>TRUCKS, RAILROAD CAR.</b><br>Jones & Laughlin Steel Co.<br>Pressed Steel Car Co.<br>Standard Steel Car Co. (Steel frame.)                                       |
| <b>TRAYS, LAUNDRY, FLAT AND ROLL<br/>RIM.</b><br>Standard Sanitary Mfg. Co.  | <b>TRUCKS, ROLLING MILL.</b><br>Jones & Laughlin Steel Co.   |
| <b>TRAYS, LAUNDRY, IRON ENAMELED.</b><br>McVay & Walker.   | <b>TRUCKS, TIMBER.</b><br>Standard Scale & Supply Co.  |
| <b>TRAYS, LAUNDRY, PORCELAIN.</b><br>Iron City Sanitary Mfg. Co.<br>Standard Sanitary Mfg. Co.   | <b>TRUCKS, WAREHOUSE.</b><br>Keystone Wire Matting Co. (Handy<br>hard wood.)<br>McKinney Mfg. Co.  |
| <b>TRIMMINGS, BATH.</b><br>Standard Sanitary Mfg. Co.  | <b>TRUNKS, INDIVIDUAL.</b><br>Boyd, Boyd & Boyd Trunk Co.<br>Capitol Trunk & Bag Co.<br>Emergency Trunk & Bag Co.<br>Kleber Trunk Co.                              |
| <b>TRIMMINGS, BATH ROOM.</b><br>Standard Sanitary Mfg. Co.   | <b>TRUNKS, SHEET STEEL.</b><br>Keystone Sheet Metal Co.<br>McKeesport Plate Co.  |
| <b>TRIMMINGS, TABLE GLASSWARE.</b><br>Collins & Wright.  | <b>TRUNKS, STEAMER.</b><br>Boyd, Boyd & Boyd Trunk Co.   |
| <b>TRIMMINGS, TINWARE.</b><br>Canonsburg Iron & Steel Co.  | <b>TRUNKS, THEATRICAL.</b><br>Boyd, Boyd & Boyd Trunk Co.  |
| <b>TRIMMINGS, URINAL STALL.</b><br>Standard Sanitary Mfg. Co.  | <b>TRUNKS, TRAVELERS' SAMPLE.</b><br>Boyd, Boyd & Boyd Trunk Co.   |
| <b>TRIPOLI.</b><br>Callery, W. W. & Co.  | <b>TRUSSES, BRIDGE.</b><br>Carnegie Steel Co.  |
| <b>TROLLEYS, STREET RAILWAY.</b><br>Nuttal, R. D. Co.  | <b>TRUSSES, BUILDING.</b><br>Carnegie Steel Co. (Steel.)   |
| <b>TROUGHES, CHARGING.</b><br>United Engineering & Foundry Co.   |  |
| <b>TROUGHES, CONVEYOR.</b><br>Heyl & Patterson.  |  |

**TRUSSES, LOOP, FOR REINFORCING CONCRETE.**

Electric Welding Co.

**TRUSSES, ROOF.**Homestead Iron Works Co. (Iron.)  
Kratzer, W. N. & Co. (Iron and steel.)  
Scaife, William B. & Sons Co. (Iron and steel.)**TRUSSES, SURGICAL.**

Pittsburgh Orthopedic Co.

**TUBES, ALUMINUM.**

Aluminum Co. of America.

**TUBES, BICYCLE.**

National Tube Co.

**TUBES, BLACK STEEL.**

Central Tube Co.

**TUBES, BOILER.**Allegheny Steel Co. (Charcoal iron and steel.)  
Monongahela Tube Co. (Soft steel, charcoal iron.)  
Moorehead Bros. Co.  
Munroe, R. & Son.  
National Tube Co. (Iron and steel.)  
Oil Well Supply Co.  
Pittsburgh Tube Co.  
Pittsburgh Seamless Tube Co. (Cold drawn, hot finish.)  
Reliance Tube Co.  
Shelby Steel Tube Co. (Cold drawn.)  
Spang Chalfant & Co. (Steel and iron.)  
Tyler Tube & Pipe Co.**TUBES, CHAIN PUMP.**

National Tube Co.

**TUBES, COLLAPSIBLE METAL FOR TOOTH PASTE, GLUE, ETC.**

Standard Specialty &amp; Tube Co.

**TUBES, DRAIN.**

Russell, J. C. Shovel Works.

**TUBES, FLEXIBLE COTTON.**

National Metal Moulding Co.

**TUBES, IGNITING.**Evans Mfg. Co., The. (Gas engine.)  
Tillinghast, B. D. (Alloy.)**TUBES, RUBBER.**

Pennsylvania Rubber Co.

**TUBING, ALUMINUM.**

Aluminum Co. of America.

**TUBING, BRASS.**McKenna Bros. Brass Co.  
Pittsburgh Brass Mfg. Co.**TUBING, COPPER.**

McKenna Bros. Brass Co.

**TUBING, NICKEL.**

Tillinghast, B. D.

**TUBING, RUBBER.**

Pennsylvania Rubber Co.

**TUBING, STEEL.**Central Tube Co. (Black and gal.)  
National Tube Co. (Seamless.)  
Pittsburgh Seamless Tube Co. (Cold drawn seamless.)  
Pittsburgh Steel Products Co.  
Pittsburgh Tube Co.  
Pittsburgh Valve Foundry & Construction Co.  
Shelby Steel Tube Co. (Seamless.)**TUBING, WELL.**Byers, A. M. Co. (Oil.)  
Monongahela Tube Co.  
National Supply Co.  
National Tube Co.  
Spang, Chalfant & Co.**TUBS, BATH, ENAMELED.**Iron City Sanitary Mfg. Co. (Porcelain.)  
McVay & Walker. (Cast iron.)  
Standard Sanitary Mfg. Co. (Porcelain, iron.)  
U. S. Sanitary Mfg. Co. (Porcelain.)**TUBS, BREWERS' FERMENTING, IRON.**

Riter-Conley Mfg. Co.

**TUBS, CONCRETE.**

Carlin's, Thomas Sons Co.

**TUBS, DUMPING.**

Carlin Machinery &amp; Supply Co.

**TUBS, FOOT BATH.**

United States Sanitary Mfg. Co.

**TUBS, INFANT BATH, JAPANNED.**

Pittsburgh Tinware Mfg. Co.

**TUBS, LAUNDRY.**

Standard Sanitary Mfg. Co.

**TUBS, WASH.**Dunlap, John Co. (Enamelled.)  
Pittsburgh Tinware Mfg. Co. (Gal. iron.)**TUMBLERS, GLASS.**Co-operative Flint Glass Co. (Candy.)  
Duncan & Miller Glass Co.  
Fry, H. C. Glass Co.  
United States Glass Co. (Pressed or blown.)**TUMBLERS, GLASS, ENAMELED AND DECORATED.**

United States Glass Co.

**TUMBLERS, LEAD BLOWN.**

United States Glass Co.

**TURBINES.**

Westinghouse Machine Co.

**TURNERS, CAKE.**

Wilson Mfg. Co.

**TURNERS, ENAMELED CAKE.**

Dunlap, John Co.

**TURNTABLES.**

Orenstein, Arthur Koppel Co.

**TURPENTINE, BRAZILIAN.**

Brazilian Turpentine Co.

**TURPENTINE SUBSTITUTE.**

Waverly Oil Works.

**TYUERES, BLAST FURNACE, COPPER AND BRONZE.**  
Keystone Bronze Co.

**TYUERES, WATER, FOR BLACKSMITH.**  
Turner, C. A., Inc.

**TYPE, PRINTING.**  
American Type Founders Co.  
Fort Pitt Type Foundry.

**TYPE, RUBBER AND BRASS.**  
Matthews, James H. & Co.

**TYPEWRITERS, VISIBLE.**  
Pittsburgh Visible Typewriter Co.

**UNDERWEAR, MUSLIN.**  
Braun, L. & Co.  
Friedburg & Nebron.  
Mansmann Bros. Co.

**UNIONS, BOILER RANGE.**  
National Tube Co.

**UNIONS, BRASS.**  
Acheson Mfg. Co.  
Kelly & Jones Mfg. Co., The.

**UNIONS, BRONZE PIPE.**  
Best Mfg. Co.  
National Tube Co.

**UNIONS, ECCENTRIC PIPE.**  
National Tube Co.

**UNIONS, FLANGED PIPE.**  
Kelly & Jones Mfg. Co., The.  
National Tube Co.  
Oil Well Supply Co.  
Pittsburgh Valve Foundry & Construction Co.

**UNIONS, IRON PIPE.**  
Kelly & Jones Mfg. Co., The. (Cast and malleable.)  
National Tube Co. (Malleable.)

**UNIONS, MALLEABLE LIP.**  
Oil Well Supply Co.

**UNIONS, PIPE.**  
Best Mfg. Co. (Bronze.)  
Kelly & Jones Mfg. Co., The. (Flanged, cast and malleable iron.)  
National Tube Co. (Bronze, flanged and malleable.)  
Oil Well Supply Co. (Flanged.)  
Pittsburgh Valve Foundry & Construction Co. (Flanged.)

**UNIONS, PIPE SOLDERING.**  
Standard Sanitary Mfg. Co.

**UNIONS, PUMP.**  
National Tube Co.

**UPHOLSTERERS.**  
Belz, Chas. W.  
Pittsburgh Upholstering Co.

**URINALS, ENAMELED.**  
McVay & Walker. (Cast iron.)  
U. S. Sanitary Mfg. Co.

**URINALS, PORCELAIN.**  
Iron City Sanitary Mfg. Co.  
Standard Sanitary Mfg. Co.  
United States Sanitary Mfg. Co.

**URNS, COFFEE.**  
Demmler & Schenck Co.  
Glockler, Bernard Co.

**UTENSILS, ALUMINUM COOKING.**  
United States Aluminum Co.

**UTENSILS, BAKERS'.**  
Knorr, W. L.

**UTENSILS, COPPER COOKING, HEAVY.**  
Gloeckler, Bernard Co.

**UTENSILS, HOTEL KITCHEN.**  
Demmler & Schenck Co.

**VACUUM CLEANERS.**  
Electric Renovator Mfg. Co.  
Rapid Specialty Co.

**VALVES, AIR.**  
Chaplin-Fulton Mfg. Co.  
Homestead Valve Mfg. Co.  
Kelly & Jones Mfg. Co., The.  
Taylor-Wilson Mfg. Co.

**VALVES, ACID.**  
National Tube Co.

**VALVES, AIR BRAKE.**  
Pittsburgh Air Brake Co.  
Westinghouse Air Brake Co.

**VALVES, AMMONIA.**  
National Tube Co.

**VALVES, ANGLE.**  
Best Mfg. Co.  
Kelly & Jones Mfg. Co., The.  
National Tube Co.  
Pittsburgh Gage & Supply Co.  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, ANTI-SCALDING.**  
Standard Sanitary Mfg. Co.

**VALVES, AUTOMATIC HIGH AND LOW PRESSURE, STEAM AND WATER.**  
Golden-Anderson Valve Specialty Co.

**VALVES, BACK PRESSURE.**  
Best Mfg. Co.  
Kelly & Jones Mfg. Co., The.  
Oil Well Supply Co.  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, BALANCE.**  
Gillespie Mfg. Co.

**VALVES, BATH MIXING.**  
Standard Sanitary Mfg. Co.

**VALVES, BLOW OFF.**  
American Foundry & Construction Co.  
Best Mfg. Co.  
Cadman, A. W. Mfg. Co. (High pressure.)  
Elliott Co.  
Homestead Valve Mfg. Co.  
Kelly & Jones Mfg. Co., The.  
Pittsburgh Gage & Supply Co.  
Pittsburgh Valve Foundry & Construction Co.  
Tranter Mfg. Co.

**VALVES, BRASS.**

American Foundry & Construction Co.  
(All kinds.)  
Best Mfg. Co.  
National Tube Co.  
Kelly & Jones Mfg. Co., The.  
Oil Well Supply Co.  
Pittsburgh Gage & Supply Co.  
Pittsburgh Valve Foundry & Construction Co. (All kinds.)

**VALVES, BUTTERFLY.**

Best Mfg. Co.  
Pittsburgh Valve Foundry & Construction Co.  
Taylor-Wilson Mfg. Co.

**VALVES, CAST IRON.**

American Foundry & Construction Co.  
(For all uses.)  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, CAST STEEL.**

American Foundry & Construction Co.  
(For all uses.)

**VALVES, CHECK.**

Best Mfg. Co.  
Evans Mfg. Co.  
Kelly & Jones Mfg. Co., The.  
National Tube Co.  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, CHRONOMETER.**

Kelly & Jones Mfg. Co., The.

**VALVES, COKE OVEN.**

Cadman, A. W. Mfg. Co.  
Kelly & Jones Mfg. Co., The.

**VALVES, COMPRESSION.**

Kelly & Jones Mfg. Co., The.

**VALVES, CRITCHLOW OPERATING, ALL KINDS.**

American Foundry & Construction Co.  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, CROSS.**

Kelly & Jones Mfg. Co., The.  
National Tube Co.  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, CYLINDER OPERATED.**

Pittsburgh Valve Foundry & Construction Co.

**VALVES, DIFFERENTIAL STEAM GOVERNED BOILER GAS.**

Merrill, Edwin C.

**VALVES, DISC.**

National Tube Co.

**VALVES, ELECTRICALLY OPERATED.**

Pittsburgh Valve Foundry & Construction Co.

**VALVES, ENGINE, GAS AND GASOLINE.**

Crescent Forgings Co.

**VALVES, FLOAT.**

Pittsburgh Valve Foundry & Construction Co.

**VALVES, FLUSH.**

Pittsburgh Gage & Supply Co.

**VALVES, FLUSHING, WATER CLOSET.**

Standard Sanitary Mfg. Co.

**VALVES, FOOT.**

Kelly & Jones Mfg. Co., The.  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, FOUR WAY.**

Homestead Valve Mfg. Co.

**VALVES, GAS.**

Chapman-Fulton Mfg. Co. (Natural.)  
Crescent Forgings Co. (Engine.)  
Kelly & Jones Mfg. Co., The. (Natural.)  
Lawson Mfg. Co. (Regulating.)  
Merrill, Edwin C.  
Munroe, R. & Son.  
Pittsburgh Brass Mfg. Co. (Brass.)  
Sterrett, Thomas Foundry Co. (Sie-  
man reversing.)  
Taylor-Wilson Mfg. Co.  
Veite Foundry & Machine Co.  
(Sieman.)

**VALVES, GAS LOG.**

Superior Mfg. Co. ("Superior.")

**VALVES, GATE.**

Best Mfg. Co.  
Kelly & Jones Mfg. Co., The.  
National Tube Co.  
Pittsburgh Gage & Supply Co. (Iron  
body brass mounted.)  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, GLOBE.**

Best Mfg. Co.  
Kelly & Jones Mfg. Co., The.  
National Tube Co.  
Pittsburgh Gage & Supply Co.  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, GULLAND.**

Best Mfg. Co.

**VALVES, HAND OPERATED.**

Pittsburgh Valve Foundry & Construction Co.

**VALVES, HOPPER.**

Standard Sanitary Mfg. Co.

**VALVES, HOSE.**

Kelly & Jones Mfg. Co., The.

**VALVES, HYDRAULIC.**

American Foundry & Construction Co.  
Best Mfg. Co.  
Diamond Machine Co. ("Bowes.")  
Homestead Valve Mfg. Co.  
National Tube Co.  
Oil Well Supply Co.  
Pittsburgh Gage & Supply Co.  
Taylor-Wilson Mfg. Co.

**VALVES, INDICATOR.**

National Tube Co.

**VALVES, LEATHER PUMP.**

Oil Well Supply Co.

**VALVES, LOCOMOTIVE.**

Homestead Valve Mfg. Co.

**VALVES, NEEDLE POINT.**  
National Tube Co.

**VALVES, NON-RETURN.**  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, PEDAL.**  
Standard Sanitary Mfg. Co.

**VALVES, PISTON.**  
Tretheway, Samuel & Co.

**VALVES, PLUG.**  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, PRESSURE.**  
Best Mfg. Co.  
Chaplan-Fulton Mfg. Co.  
National Tube Co. (Regulating.)  
Monessen Foundry & Machine Co. (Reducing.)  
Pittsburgh Valve Foundry & Construction Co. (Back.)

**VALVES, QUICK OPENING.**  
Kelly & Jones Mfg. Co., The.  
National Tube Co.  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, RADIATOR.**  
Kelly & Jones Mfg. Co., The.  
National Tube Co.

**VALVES, REDUCING.**  
Chaplan-Fulton Mfg. Co.  
Elliott Co.

**VALVES, REGISTER.**  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, REGULATING.**  
Lawson Mfg. Co. (Gas.)  
National Tube Co. (Pressure.)  
Monessen Foundry & Machine Co. (Pressure.)  
Robertshaw Mfg. Co. (Heat.)

**VALVES, REVERSING.**  
Sterritt, Thomas Foundry Co. (Sieman gas.)  
Taylor-Wilson Mfg. Co.

**VALVES, RUBBER.**  
Pennsylvania Rubber Co.

**VALVES, SAFETY.**  
Best Mfg. Co.  
Kelly & Jones Mfg. Co., The.  
Pittsburgh Gage & Supply Co.

**VALVES, SEMI-STEEL.**  
American Foundry & Construction Co.

**VALVES, SIEMAN.**  
Sterritt, Thomas Foundry Co. (Gas reversing.)  
Taylor-Wilson Mfg. Co.  
Velte Foundry & Machine Co. (Gas.)

**VALVES, STANDARD BRASS.**  
National Tube Co.

**VALVES, STEAM.**

Chaplan-Fulton Mfg. Co.  
Golden-Anderson Valve Specialty Co. (Automatic high and low pressure.)  
Merrill, Edwin C. (Standard.)  
Monessen Foundry & Machine Co. (Automatic.)  
Pittsburgh Brass Mfg. Co.  
Wilson-Snyder Mfg. Co.

**VALVES, STEEL.**  
American Foundry & Construction Co.

**VALVES, STRAIGHTWAY.**  
Homestead Valve Mfg. Co.

**VALVES, SWING CHECK.**  
Kelly & Jones Mfg. Co., The.

**VALVES, TANK.**  
Best Mfg. Co.

**VALVES, TANNER & AIKEN OPERATING.**  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, THERMOSTAT.**  
Lawson Mfg. Co.  
Pittsburgh Brass Mfg. Co.

**VALVES, THREE-WAY.**  
Homestead Valve Mfg. Co.

**VALVES, THROTTLE.**  
Kelly & Jones Mfg. Co., The.  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, TRANSFER.**  
Kelly & Jones Mfg. Co., The.  
Pittsburgh Valve Foundry & Construction Co.

**VALVES, UNION.**  
National Tube Co.

**VALVES, VACUUM RELIEF.**  
Elliott Co.

**VALVES, WATER GAUGE.**  
Homestead Valve Mfg. Co.

**VALVES, WORKING FOR OIL WELLS..**  
Evans Mfg. Co.

**VALVES, Y.**  
Kelly & Jones Mfg. C., The.  
National Tube Co.

**VANADIUM, ALUMINO.**  
American Vanadium Co.

**VANADIUM, BRONZE.**  
American Vanadium Co.

**VANADIUM, CHROME.**  
Vulcan Crucible Steel Co.

**VANADIUM, CUPRA.**  
American Vanadium Co.

**VANADIUM, FERRO.**  
American Vanadium Co.

**VANES, WEATHER.**  
Taylor & Dean.

**VARNISHES.**

Atlas Paint Co. (Shellac and dipping.)  
 Ball Chemical Co.  
 Benolite Co., The. (Insulating.)  
 Eagle Paint & Varnish Works. (Asphalt, clear, insulating.)  
 Globe Varnish Co.  
 Lawrence, W. W. Co.  
 McClintock & Irvine.  
 Nevin, T. H. Co.  
 Painter, Joel T.  
 Sterling Varnish Co. (Insulating.)  
 Thompson & Co.  
 McKeesport Plate Co.

**VASES, GLASS.**

United States Glass Co.

**VASES, LAWN, FOR FLOWERS.**

Elverson, W. H. Pottery Co.

**VATS, MEAT BOILING.**

Gloekler, Bernard Co.

**VAULTS, BANK.**

Barnes Safe & Lock Co.  
 Clark Safe & Vault Co.

**VAULTS, CEMENT.**

Waterproof Cement Vault Co.

**VAULTS, BURGLAR PROOF.**

Barnes Safe & Vault Co.  
 Clark Safe & Vault Co.

**VAULTS, FIRE PROOF.**

Barnes Safe & Vault Co.  
 Clark Safe & Vault Co.

**VENTILATORS.**

Bailey Reflector Co. (Window.)  
 Pittsburgh Gage & Supply Co. (Roof  
 "Caco.")  
 Standard Sheet Metal Mfg. Co.

**VIADUCTS.**

Carnegie Steel Co. (Iron and steel.)  
 Egleay, John Jr., Co. (Iron and steel.)  
 Penn Bridge Co. (Steel.)  
 McClintic-Marshall Construction Co.

**VIALS, GLASS HOMEOPATHIC MEDICINE.**

Jeannette Glass Co.

**VIMOMETERS, CLOSET.**

Standard Sanitary Mfg. Co.

**VIMOMETERS, URINAL.**

Standard Sanitary Mfg. Co.

**VINEGARS.**

Cruikshank Bros. Co.  
 Heinz, H. J. Co.  
 Lutz & Schramm Co.  
 Price & Lucas.

**VISES, BENCH.**

Jones & Laughlin Steel Co.

**VISES, BLACKSMITHS'.**

Iron City Tool Works.

**VISES, BOX AND SCREW.**

Iron City Tool Works.

**VISES, CARRIAGE MAKERS'.**

Jones & Laughlin Steel Co.

**VISES, CLIPPING, HEAVY.**

Iron City Tool Works.

**VISES, HORSESHOERS'.**

Iron City Tool Works.

**VISES, PARALLEL.**

Jones & Laughlin Steel Co.

**VISES, SOLID BOX.**

Iron City Tool Works.

**VISES, STANDARD DIAMOND HOLDFAST SOLID BOX.**

Iron City Tool Works.

**VISES, WOODWORKERS'.**

Jones & Laughlin Steel Co.

**VOLTMETERS, SWITCHBOARD.**

Pittsburgh Electrical & Machine Works.  
 Westinghouse Electric & Mfg. Co.

**VULCANIZERS, TIRE.**

Motor Tire Repair & Supply Co.

**WAGONS, ALL KINDS COMMERCIAL.**

Amrhein, Andrew.  
 Beckert, William.  
 Deisenroth Wagon Works.  
 Deutenberg, F. A.  
 Deringer, Anton.  
 Deringer, Frank.  
 Doehla Wagon Co.  
 Domhoff Wagon Co.  
 Eagle Wagon Works.  
 Eisenhauer, George Jr.  
 Fischer, A. E. Wagon Co.  
 Frazier & Foltz.  
 Hensel, W. L.  
 Hittner, W. J.  
 Huys, John J. Sons.  
 Kaufmann Louis.  
 Kholos Wagon Co.  
 Kress Bros. Wagon Co.  
 Lange, H. Wagon Co.  
 Lechnitzky, L. C.  
 Leonard, W. H. Co.  
 Linde, Herman.  
 Leöffler, L.  
 Mayer Wagon Co.  
 Metz & Miller.  
 Moore Wagon Co.  
 McClinton & Co.  
 Santer, John.  
 Sippel, Otto.  
 Sismour, Frank.  
 Steup Bros.  
 Wangler, C. S. & Son.  
 Ward, Samuel.  
 Weir, J. G. & Son.

**WAGONS, LARRY.**

Phillips Mine & Mill Supply Co.

**WAINGSCOTING, GLASS, OPALITE.**

Opalite Tile Co., The.

**WAINGSCOTING, WOOD.**

Wilkinsburg Stair & Mfg. Co.

**WALLS, GLASS, OPALITE.**

Opalite Tile Co., The.

**WASHERS, AXLE.**

Graham Nut Co.  
 Hubbard & Co.  
 Oliver Iron & Steel Co.

**WASHERS, COAL.**

Pittsburgh Coal Washer Co.

**WASHERS, COKE.**

Pittsburgh Coal Washer Co.

**WASHERS, COPPER.**

Hussey, C. G. &amp; Co.

**WASHERS, CORK.**

Armstrong Cork Co.

**WASHERS, DISH.**

Gloekler, Bernard.

**WASHERS, GAUGE GLASS.**

Pennsylvania Rubber Co.

**WASHERS, INSULATING.**

Westinghouse Electric &amp; Mfg. Co.

**WASHERS, IRON.**

Allegeny Foundry Co. (Cast.)  
 Graham Nut Co.  
 Hubbard & Co.  
 Lanz, M. & Son. (Wrought, cast.)  
 Neely Nut & Bolt Co. (Wrought.)  
 Oliver Iron & Steel Co.  
 Pittsburgh Screw & Bolt Co.  
 Republic Iron & Steel Co.

**WASHERS, METAL.**

American Nut &amp; Bolt Fastener Co.

**WASHERS, SPECIAL.**

Hubbard &amp; Co.

**WASHERS, STEEL.**

Graham Nut Co.  
 Lanz, M. & Son.  
 Oliver Iron & Steel Co.  
 McKinney Mfg. Co. (Wrought.)  
 Pittsburgh Screw & Bolt Co.  
 Republic Iron & Steel Co.

**WASHERS, STREET.**

Standard Sanitary Mfg. Co.

**WASHING COMPOUND.**

Call Again Washing Compound Co.

**WASTE, BASIN.**

Standard Sanitary Mfg. Co.

**WASTE, BATH.**

Standard Sanitary Mfg. Co.

**WASTE, COTTON, WHITE AND COLORED.**Pittsburgh Waste Co. (For machine  
wiping.)**WASTE, LEAD PIPE.**

National Lead &amp; Oil Co.

**WASTE, WIPING.**

Pittsburgh Waste Co.

**WASTE, WOOL, FOR PACKING.**

Pittsburgh Waste Co.

**WATER, APERIENT.**

Red Raven Corporation.

**WATER SOFTENING PLANTS.**

Scaife, William B. &amp; Sons Co.

**WATTMETERS, ALTERNATIVE.**

Westinghouse Electric &amp; Mfg. Co.

**WATTMETERS, CURVE DRAWING.**

Westinghouse Electric &amp; Mfg. Co.

**WATTMETERS, PORTABLE.**

Westinghouse Electric &amp; Mfg. Co.

**WATTMETERS, SWITCHBOARD.**

Westinghouse Electric &amp; Mfg. Co.

**WAX, BEES.**Chamberlain & Johnson.  
Tweed & Botsford.**WAX, FLOOR.**Eagle Paint & Varnish Co.  
Painter, Joel T. Co.**WAX, MINERS'.**Freedom Oil Works.  
Miller's, A. D. Sons Co.**WAX, PARAFFINE.**Freedom Oil Works.  
Pittsburgh Oil Refining Co.  
Waverly Oil Works.**WAX, SEALING.**

Chamberlain &amp; Johnson.

**WEATHERSTRIPS, BRASS AIR TIGHT.**

Pittsburgh Air Tight Metal Door Sill Co.

**WEDGES, AXE, WOOD CHOPPERS'.**Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.**WEDGES, BUCKING.**

Iron City Tool Works.

**WEDGES, COAL.**Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.**WEDGES, FALLING.**Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.**WEDGES, JOURNAL BEARING.**

Western Tool &amp; Forge Co.

**WEDGES, SAW.**Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.**WEDGES, SPLITTING.**

Iron City Tool Works.

**WEDGES, STAVE.**Hubbard & Co.  
Iron City Tool Works.**WEDGES, STEEL.**Lanz, M. & Son.  
Oliver Iron & Steel Co.**WEDGES, STONE.**Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.**WEDGES, TIE.**Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.**WEDGES, TRUCKEE.**

Iron City Tool Works.

**WEDGES, WOOD CHOPPERS'.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.

**WEIGHTS, BALL.**

Patterson, W. W. Co.

**WEIGHTS, PAPER.**

Co-operative Flint Glass Co.  
Graeser Mfg. Co. (Advertising glass.)

**WEIGHTS, SASH.**

Allegheny Foundry Co.  
Etna Foundry Co.

**WEIGHTS, SCALE.**

Standard Scale & Supply Co.

**WEIGHTS, TEST.**

Standard Scale & Supply Co.

**WELDERS.**

American Foundry & Construction Co.  
Atlas Oxy-Acetylene Welding & Supply Co.

**WELDERS, ACETYLENE.**

Ninth Avenue Garage.  
Pittsburgh Reinforced Brazing & Machine Co.

**WELDERS, ELECTRIC.**

Pittsburgh Metal Brazing Co. (Steel, cast iron.)

**WELDING TO ORDER, ALUMINUM.**

Pittsburgh Reinforced Brazing and Machine Co.

**WELDING TO ORDER, OXY-ACETYLENE.**

Pittsburgh Reinforced Brazing and Machine Co.

**WHEELS, ADAMITE GRINDING.**

Pittsburgh Emery Wheel Co.

**WHEELS, ALL KINDS CAST.**

Penna. Casting & Machine Co.

**WHEELS, AUTOMOBILE.**

Schnable, G. A. & Sons.

**WHEELS, BAND.**

Mesta Machine Co.

**WHEELS, BULL, REVERSIBLE.**

Butler Engine & Foundry Co.

**WHEELS, CAR.**

Butler Car Wheel Co. (Mine.)  
Carnegie Steel Co. (Pressed steel.)  
Central Car Wheel Co. (Chilled iron.)  
Coshocton Iron Co. (Mine.)  
Greensburg Foundry & Machine Co. (Mine.)

Hockensmith Wheel & Mine Car Co. (Mine.)

Irwin Foundry & Mine Car Co. (Mine.)  
Jones & Laughlin Steel Co. (Steel truck.)

Mesta Machine Co. (Steel.)  
National Car Wheel Co. (All kinds cast iron.)

Pennsylvania Malleable Co.  
Phillips Mine & Mill Supply Co. (Mine all kinds.)

Pittsburgh Iron & Steel Foundries Co. (Mine.)

Pittsburgh Steel Foundry.

**WHEELS, CAST IRON, RAILROAD AND STREET RAILWAY.**

National Car Wheel Co.

**WHEELS, CAST IRON, SPECIAL.**

National Car Wheel Co.

**WHEELS, CORK.**

Armstrong Cork Co.

**WHEELS, CORUNDUM.**

Pittsburgh Emery Wheel Co.

**WHEELS, EMERY.**

Pittsburgh Emery Wheel Co.

**WHEELS, FITTED TO AXLES.**

National Car Wheel Co.

**WHEELS, FLY.**

Jones & Laughlin Steel Co.  
Mackintosh-Hemphill & Co.  
Taylor-Wilson Mfg. Co.

**WHEELS, ROPE.**

Mesta Machine Co.  
Taylor-Wilson Mfg. Co.

**WHEELS, SHEAVE.**

Charleroi Foundry & Machine Co.  
Lanz, M. & Son.

**WHEELS, TROLLEY.**

Nuttal, R. D. Co.

**WHEELS, WATER, SECTIONAL TURBINE.**

Milholland, J. & J. B.

**WHIFFLETREES.**

Diamond Forging & Mfg. Co.

**WHISKEY.**

Economy Distilling Co.  
Finch, Joseph S. & Co.  
Hamburger, Ph. Co.  
Large Distilling Co.  
Moore, Thomas Distilling Co.  
Overholt & Co.  
Vandergrift Distilling Co.

**WHISTLES, BRASS CHIME.**

Kelly & Jones Mfg. Co., The.

**WHISTLES, COMPRESSED AIR.**

Westinghouse Air Brake Co.

**WHISTLES, PLAIN.**

Kelly & Jones Mfg. Co., The.

**WHISTLES, STEAM.**

Kelly & Jones Mfg. Co., The.

**WICK, BRAIDED, FOR TORCHES.**

Sands Mfg. Co., The.

**WICK, LAMP, MINERS'.**

Anton, Christopher L.

**WILLOW WARE.**

Marnhout, D.

**WINDLASSES.**

Carlin's, Thomas Sons Co.

**WINDOWS, LEADED.**

Hunt, Henry.  
Petgen Glass Co.

Rudy Bros. Co.

**WINDOWS, GLASS.**

Hunt, Henry. (Domestic memorial.)  
 Kim, George A. & Co. (Memorial.)  
 Petgen Glass Co. (Art, stained and leaded.)  
 Pittsburgh Art Glass Co. (Church, memorial.)  
 Rasner & Dinger Co. (Wired.)  
 Rudy Bros. Co. (Leaded.)  
 Willett Stained Glass Co. (Memorial.)

**WINDOWS, MEMORIAL.**

Hunt, Henry. (Domestic glass.)  
 Kim, George A. & Co.  
 Petgen Glass Co.  
 Pittsburgh Art Glass Co.  
 Willett Stained Glass Co.

**WINDOWS, STAINED.**

Petgen Glass Co.

**WINDOWS, WOOD.**

Commercial Sash & Door Co. (Circle.)  
 Edgecomb, W. H. & Sons.

**WINDSHIELDS, AUTOMOBILE.**

Banker Windshield Co.

**WINE, BITTER.**

Hollander Bros. Drug Co.

**WIRE, ALL KINDS.**

American Steel & Wire Co.

**WIRE, ALUMINUM.**

Aluminum Co. of America.

**WIRE, ARMATURE BINDING.**

Standard Underground Cable Co.

**WIRE, ASBESTOS COVERED.**

Standard Underground Cable Co.

**WIRE, AUTOMOBILE.**

Standard Underground Cable Co.

**WIRE, AWL.**

Page Woven Wire Fence Co.  
 Kidd Bros. & Burgher Steel Wire Co.  
 Pittsburgh Tool Steel Wire Co.

**WIRE, BARBED.**

Page Woven Wire Fence Co.  
 Jones & Laughlin Steel Co.  
 Pittsburgh Steel Co.

**WIRE, BARE.**

American Steel & Wire Co.  
 Aluminum Co. of America. (Alumini-  
 num.)  
 Standard Underground Cable Co.

**WIRE, CABLE.**

Aluminum Co. of America. (Alumi-  
 num.)  
 American Steel & Wire Co.  
 Page Woven Wire Fence Co.  
 Pittsburgh Steel Co.

**WIRE, COPPER.**

Hussey, C. G. & Co.

**WIRE, CRUCIBLE, C. D. FOR FINE SPIRAL SPRINGS.**

Kidd Bros. & Burgher Steel Wire Co.  
 (Round or square.)

**WIRE, CRUCIBLE, C. D. FLAT FOR GUN SPRINGS, ETC.**

Kidd Bros. & Burgher Steel & Wire Co.

**WIRE, CRUCIBLE STEEL.**

Pittsburgh Tool Steel Wire Co.  
 Kidd Bros. & Burgher Steel Wire Co.

**WIRE, DENTAL.**

American Steel & Wire Co.  
 Pittsburgh Tool Steel Wire Co.

**WIRE, FENCE.**

American Steel & Wire Co.  
 Page Woven Wire Fence Co.  
 Pittsburgh Steel Co.  
 Townsend, C. C. & E. P.

**WIRE, FISH.**

Steel City Electric Co.

**WIRE, FLEXIBLE ELECTRIC.**

Standard Underground Cable Co.

**WIRE, GALVANIZED.**

Page Woven Wire Fence Co.

**WIRE, GIMLET.**

Pittsburgh Tool Steel Wire Co.

**WIRE, GROOVED CHANNEL PIN FOR RAILROAD SIGNALS.**

Kidd Bros. & Burgher Steel Wire Co.

**WIRE, INSULATED.**

Aluminum Co. of America. (Alumi-  
 num.)  
 American Steel & Wire Co.  
 Standard Underground Cable Co.  
 (Rubber.)

**WIRE, IRON.**

American Steel & Wire Co.  
 Page Woven Wire Fence Co.  
 Townsend, C. C. & E. P.

**WIRE, KNULED.**

Pittsburgh Tool Steel Wire Co.

**WIRE, LEAD COVERED.**

Standard Underground Cable Co.

**WIRE, LEATHER SEWING, FOR KNITTING MACHINES.**

Kidd Bros. & Burgher Steel Wire Co.

**WIRE, MAGNET.**

Standard Underground Cable Co.

**WIRE, MARKET.**

American Steel & Wire Co.  
 Griswold Wire Co. (Annealed.)  
 Page Woven Wire Fence Co.  
 Pittsburgh Tool Steel Wire Co.  
 Pittsburgh Steel Co.  
 Townsend, C. C. & E. P.

**WIRE, NAIL SET.**

Pittsburgh Tool Steel Wire Co.

**WIRE, NEEDLE.**

American Steel & Wire Co.  
 Kidd Bros. & Burgher Steel Wire Co.  
 Globe Wire Co.  
 Page Woven Wire Fence Co.  
 Pittsburgh Tool Steel Wire Co.

**WIRE, NICKEL STEEL.**

American Steel & Wire Co.  
 Pittsburgh Tool Steel Wire Co.

**WIRE, PIN.**

American Steel & Wire Co.  
 Pittsburgh Tool Steel Wire Co.

**WIRE, PINION.**

American Steel & Wire Co.  
Page Woven Wire Fence Co.  
Pittsburgh Tool Steel Wire Co.

**WIRE, PIVOT.**

American Steel & Wire Co.  
Pittsburgh Tool Steel Wire Co.

**WIRE, SCREW.**

American Steel & Wire Co.  
Pittsburgh Tool Steel Wire Co.

**WIRE, SPECIAL.**

Page Woven Wire Fence Co.

**WIRE, SPRING.**

American Steel & Wire Co.  
Kidd Bros. & Burgher Steel Wire Co.  
Page Woven Wire Fence Co.  
Pittsburgh Tool Steel Wire Co.

**WIRE, TELEGRAPH.**

Page Woven Wire Fence Co.

**WIRE, TELEPHONE.**

Page Woven Wire Fence Co.

**WIRE, TEMPERED.**

American Steel & Wire Co.  
Page Woven Wire Fence Co.  
Pittsburgh Tool Steel Wire Co.

**WIRE, TINNED.**

Pittsburgh Steel Co.

**WIRE, VANADIUM.**

American Vanadium Co.

**WIRE, WEATHERPROOF.**

Standard Underground Cable Co.

**WIRE, WOOD BIT.**

Pittsburgh Tool Steel Wire Co.

**WIRE WORK, ORNAMENTAL.**

Cornwall, E. & Co.  
Knell, Jacob.  
Mohn, Henry.  
Star Ornamental Iron & Wire Works Co.  
West Liberty Iron & Wire Works.

**WIRE WORK, PARTITION.**

Vilsack, Martin Co.

**WOODENWARE, BAKERS'.**

Knorr, W. L.

**WOOL PULLERS.**

Mardorf, C. & Son.  
McGraw, P. Wool Co.  
Pittsburgh Wool Co.

**WRENCHES, AUTOMOBILE.**

Western Tool & Forge Co.

**WRENCHES, AXLE.**

Oliver Iron & Steel Co.

**WRENCHES, COCK.**

National Tube Co.

**WRENCHES, ENGINEERS'.**

Jones & Laughlin Steel Co.

**WRENCHES, MACHINISTS'.**

Jones & Laughlin Steel Co.

**WRENCHES, MONKEY, QUICK ACTING AND ADJUSTABLE.**

Keystone Machine Co.

**WRENCHES, MOTOR.**

Western Tool & Forge Co.

**WRENCHES, PIPE.**

Crescent Forging Co.  
Oil Well Supply Co.

**WRENCHES, SOCKET.**

Dixon, Charles E. & Sons.

**WRENCHES, SPECIAL.**

Pittsburgh Block & Mfg. Co.

**WRENCHES, SWIVEL.**

Duff Mfg. Co.

**WRENCHES, TRACK.**

Hubbard & Co.  
Iron City Tool Works.  
Klein-Logan Co.  
Oliver Iron & Steel Co.

**WRINGERS, CLOTHES.**

Pittsburgh Wringer & Sweeper Co.

**YACHTS, GASOLINE, PLEASURE AND SPEED.**

Price, R. C. & Co.

**YARDS, PLAY, FOR BABIES, COLLAPSIBLE AND EXTENSION.**

Weaver Specialty Co.

**YAWLS, POWER AND STEAMBOAT.**

Price, R. C. & Co.

**YEAST.**

Fleischmann Co., The.  
Vienna Pressed Yeast Co.

**YOKES, BREAST, PATENT CLIP SNAP.**

Sossong, Charles B. Co.

**YOKES, NECK, TUBULAR STEEL.**

Diamond Forging & Mfg. Co.

**YOKES, WAGON BRACE.**

Diamond Forging & Mfg. Co.

**ZATEK CHOCOLATE.**

Pennsylvania Chocolate Co.

**ZIG-ZAG CHOCOLATE.**

Clark, D. L. Co., The.

**ZINC.**

Nevin, T. H. Co.  
Pennsylvania Salt Mfg. Co. (Chloride.)

**ZINC ETCHINGS.**

Bragdon, John C.  
Liberty Engraving Co.  
Publicity Engraving Co.  
Rawsthorne Engraving Co.  
Reliance Engraving Co.

**ZINC, WORK IN SHEET.**

O'Leary, J. B.

# JOBBERS' LINES

## ADDRESSING MACHINES.

Addressograph Co.

## ARTISTS' SUPPLIES.

Kurtz, Langbein & Swartz.

## ARTS, FINE.

Gillespie, J. J. & Co.

## ASBESTOS.

Carey, Phillip Mfg. Co.

## ASBESTOS MATERIALS.

Carey, Phillip Mfg. Co.

Speer, W. B.

## AUTOMOBILES.

Abbott-Detroit Co.

Alco-Pittsburgh Sales Co.

Alpine Motor Car Co.

Baker Electric Sales Agency.

Bald, Eddie Motor Car Co.

Bennett, W. W. Motor Car Co.

Dallas Automobile Co.

DeRoy, Aaron Motor Car Co.

Diamond Automobile Co.

Empire Motor Car Co.

Enterprise Automobile Co.

Federal Motor Car Co.

Fey Motor Car Co.

Flynn Motor Car Co.

Forbes Motor Car Co.

Ford Motor Co.

Franklin Motor Car Co.

Gardner Garage & Supply Co.

General Automobile Co.

Highland Automobile Co.

Hupmobile Co.

Iron City Auto Co.

Jackson Motor Supply Co.

Keystone Automobile Co.

Kline Kar Motor Co.

Locomobile Co. of America.

Martin, L. G.

Michigan Automobile Co.

McAllister Bros. Motor Car Co.

McCurdy-May Co.

National Motor Car Co.

Packard Motor Car Co.

Painter-Dunn Co.

Phelan, A. X.

Pierce-Arrow Automobile Co.

Pioneer Motor Car Co.

Pittsburgh-Chalmers Co.

Pittsburgh Interstate Co.

Pittsburgh-Mercer Automobile Co.

Pullman Motor Car & Livery Co.

R. C. H. Automobile Co.

Regal Motor Car Co.

S. G. V. Cars.

Schenley Automobile Co.

Selden-Pittsburgh Automobile Co.

Shadyside Automobile Co.

Standard Automobile Co.

State Automobile Co.

## AUTOMOBILES.

Sterns, F. B. Co., The.

Stevens-Duryea Motor Car Co.

Studebaker Automobile Co.

Sullivan, C. L.

Union Motor Car Co.

Vestal Motor Car Co.

White Co., The.

Winton Motor Car Co.

## AUTOMOBILE ACCESSORIES.

Auto Accessories Co.

Consumers Auto Supply Co.

Duquesne Auto Parts Co.

## BAKERS' SUPPLIES.

Knorr, W. L.

Pittsburgh Bakers & Confectioners Supply Co.

Ward Bros.

## BAR FIXTURES.

Delp's, S. Sons.

Denmarsh & Moll.

## BAR GOODS.

Zeber, Daniel W.

## BARBER SUPPLIES.

Edlis Barber Supply Co.

Black, Ross W.

Covalt & Smith.

Makrauer's Barber Supply House.

## BARRELS.

Ablett, William.

Danovitz Bros.

McNulty, J. H. & Bro.

Pittsburgh Barrel & Cooperage Co.

White, James. (Oil.)

## BEARINGS.

Hyatt Roller Bearing Co., of Detroit.

## BOILERS.

Babcox & Wilcox Co., The.

Manchester, William & Co.

## BOLTS.

National Supply Co.

## BOOTS.

Childs, H. & Co.

Stewart Bros. Co.

Wagner Bros.

## BOTTLES.

Pittsburgh Brewers & Bottlers Supply Co.

Ripp, A. & Bro.

## BOWLING SUPPLIES.

Wuerthele, George & Sons.

Wuerthele, William.

**BUILDERS' SUPPLIES.**

Davidson, J. K. & Bro.  
 Diehl, Adam Sons.  
 Duncan & Porter Co., The.  
 Harris, J. A. Co.  
 Heppenstall & Marquis.  
 Houston Bros.  
 Keller Bros.  
 Knox, Strouss & Bragdon.  
 Leggett, William T. Co.  
 McKallip & Co.

**BUNGS.**

Crown Cork & Seal Co.  
 Mallinger, Samuel.

**BURLAP.**

Gerwig, H. & Sons.

**BUTCHERS' SUPPLIES.**

Allegheny Butchers Supply Co.  
 Pittsburgh Butchers & Packers Supply Co.

**CARD INDEX SYSTEMS.**

Yawman & Erbe Mfg. Co.

**CASH REGISTERS.**

National Cash Register Co.  
 U. S. Cash Register Exchange.

**CHANDELIERS.**

Gillett Chandelier Co.  
 Reineke-Wilson Co.

**CHINA.**

Greer-Milliken China Co.  
 Hamilton & Clark Co.  
 Milliken-Schenck China Co.

**CLOTHING.**

Abels & Ress.  
 Frank Samuel B.  
 Gordon, Louis Jr.  
 Kingsbaker, L. & Co.  
 Sheinberg & Weisberg. (Ladies').  
 Wolk Bros.  
 Wolk, J. N. & Co.

**COAL TAR PRODUCTS.**

Young, J. F. Co.

**COCKS.**

McCausland, W.  
 Pratt & Cady.

**COFFEE.**

Arbuckle & Co.  
 Campbell & Woods Co., The.  
 Dilworth Bros. Co.  
 Mars, A. L. & Co.  
 Young-Mahood Co.

**CONFETIONS.**

McKee, J. K. Co.  
 Reymer & Bros.  
 Wingert, Robert R. & Co.

**COOKING UTENSILS.**

Aluminum Cooking Utensils Co.

**CORDAGE.**

Flocker, John Co.  
 Hooven & Allison.  
 Interstate Cordage & Paper Co.

**CORKS.**

Crown Cork & Seal Co.  
 Mallinger, Samuel.

**DICTAPHONES.**

Dictaphone, The.

**DRAWING MATERIALS.**

Johnston, Wm. G. & Co.  
 Kopp, G. L. & Co.  
 McCloy, A. W. & Co.  
 Weldin, J. R.

**DRUGS.**

Gilmore, W. J. Drug Co.  
 Kelly, George A. Co.  
 Shipley-Massingham Co.

**DRY GOODS.**

Arbuthnot-Stevenson Co.  
 Constantine, M. J.  
 Haines, James B. & Sons Co.  
 Pittsburgh Dry Goods Co.  
 Rauh Bros. & Co.  
 Salem, Murray.

**ELECTRIC SIGNS.**

Federal Electric Sign System.

**ELECTRIC SUPPLIES.**

Columbia Incandescent Lamp Co.  
 (Light.)  
 Commonwealth Electric & Supply Co.  
 Cooke-Wilson Electric Supply Co.  
 Doubleday-Hill Electric Co.  
 General Electric Co.  
 Keystone Electric Telephone Co.  
 Miller-Owen Electric Co.  
 McCullough, W. T. Electric Co.  
 Pittsburgh Gas & Electric Fixture Co.  
 Price, John McC. Co.  
 Robbins Electric Co.  
 Union Electric Co.

**ELEVATORS.**

Elevator Construction Co.  
 Otis Elevator Co.

**EMBROIDERIES.**

Sussman & Arnold.

**ENGINES.**

Fairbanks, Morse & Co.

**FARMING IMPLEMENTS.**

Duquesne Co., The.  
 International Harvester Co.

**FIREPROOF MATERIALS.**

Fireproof Materials Co.

**FITTINGS, PIPE.**

Chandler-Boyd Supply Co.  
 Jarecki Mfg. Co.

**FLOUR.**

Christian, George & Co.  
 Koch, Charles & Co.

**FOUNDRY SUPPLIES.**

Hill & Griffith Co., The.

**FURNITURE.**

Baker Office Furniture Co.  
 Half, Felix & Bro.  
 Marietta Chair Co.

**FURS.**

Goldinger, A.

**GAS APPLIANCES.**

Reineke-Wilson Co.

## GLASS.

Atlantic Glass Co.  
Pittsburgh Plate Glass Co.

## GLUE.

Pittsburgh Leather & Glue Co.  
Wilhelm, Henry.

## GREASES.

Gasoline Supply Co.

## HARDWARE.

American Hardware & Supply Co.  
Barker Hardware Co.  
Fort Pitt Hardware Co.  
Fricke & Lindsay Co.  
Graff Bros., Inc.  
Lindsay, J. C. Hardware Co.  
Logan-Gregg Hardware Co.  
Lyle Bros. (Carriage)  
McLean & McGinness. (Heavy.)  
Scarborough & Klaus Co.  
Steiner & Voegely Hdw. Co.  
Wolff-Lane Hardware Co.  
Woodwell, Joseph Co.

## HARNESS.

Engel, Andrew Sr.  
Gareif, J. G.  
Pittsburgh Harness Supply Co.  
Pittsburgh Waterproof Co.

## HAT FRAMES.

Pittsburgh Hat Frame Co.

## HATS.

Ayers-Young Hat Co.  
Dietz, George E.  
Gamble, R. G. & Co.  
Goorin, Shapira & Co.  
Leard, J. S.  
Seeley, L. P. Co.

## HEATERS.

Beeler Water Heater Co. (Water.)  
Gabel Water Heater Co. (Water.)  
Modern Water Supply Co.

## HEATING APPARATUS.

Anderson-Darragh Co.  
Bartley-Kennedy & Co.  
Maginn, P. F. & Co.  
McGinness-Smith & Co.  
Rector-Pittsburgh Lighting & Heating Co.  
Reliance Heater & Supply Co.  
Standard Heating & Radiator Co.

## HIDES.

East End Hide Co.  
Pittsburgh Hide & Tallow Co.

## HOSIERY.

Goldberg, A.

## HOTEL EQUIPMENT.

Woessner & Wunderlee.

## HOUSEHOLD SUPPLIES.

Griffith, W. J.

## INDIA RUBBER.

Phillips, J. & H.

## IRON.

Girard Iron Co.

## IRON SCRAP.

Hausman & Wimmer Co.  
Isay, H. & Bro.  
Jones, J. B. & Co.  
Katz, Max & Son.  
Koehler, J. P. Co.  
Kramer, L.  
Maloney, T. J. Iron Works.  
Riccordino, A.  
Shoub, John.  
Solomon Bros.  
Speer, M. B. & Co.  
Wimmer, William F.

## JANITORS' SUPPLIES.

Duquesne Janitors Supply Co.

## JEWELRY.

Barrett, George B. Co.  
Bonn, M. Co.  
Cerf, Sol. & Co.  
Consolidated Mfg. Co.  
Davis, S. Co.  
Gerwig, Albert H.  
Gillespie Bros.  
Gluck, Martin.  
Grainger Bros.  
Kingsbacher Bros.  
Pittsburgh Watch & Metal Co.

## LACE.

Gazel-Rashid & Co.

## LAMPS.

Brilliant Electric Works. (Electric.)  
Ochiltree, W. H. & Co.

## LAUNDRY SUPPLIES.

Kohnstamm, H. & Co.

## LEATHER.

Adolph, William.  
Bier & Strauss.  
Caplan, S.  
Junker, J. A. H.  
Pittsburgh Leather & Glue Co.  
Quaker City Rubber Co.  
Roedel-Braun Leather Co.  
Schieren, Charles A. Co.  
Weinman Bros.

## LEATHER GOODS.

Emergency Trunk & Bag Co.  
Hartley Rose Belting Co.  
Page Belting Co.

## LUMBER.

Keystone Lumber Co.

## MACHINERY.

Baird Machine Co.  
Briggs Machinery Co.  
Brown & Zortman Machine Co.  
Dodge Mfg. Co. (Transmission.)  
Gausman Machinery Co. (Second hand.)  
Globe Mfg. & Supply Co.  
Greenwood Construction & Supply Co.  
(Refrigerating.)  
Kirk Supply Co.  
McDowell & Co.  
Russell Machinery Co. (Second hand.)  
Schlelein, P. Machinery Co.  
Tranter Mfg. Co.  
Wickes Bros.  
York Mfg. Co. (Ice.)

## MACHINERY SUPPLIES.

Machinists Supply Co.  
Somer, Fitler & Todd Co.

**MANTELS, TILES, ETC.**

Aiken & Co.  
 East End Mantle & Tile Co.  
 Highland Mantle & Tile Co.  
 Homewood Mantle & Tile Co.  
 Letsch, F. J. & Co.  
 Spellman, M. J.  
 Twin City Tiling Co.  
 Wabash Mantle & Tile Co.

**MATCHES.**

Union Match Co.

**MATTRESSES.**

Dixie Cotton Felt Mattress Co.  
 Sterns & Foster Co.

**MERCHANDISE.**

Abraham, Ph. & Bro.  
 Horne Bros.

**METAL.**

Bock, William M. & Co.  
 Follansbee Bros. Co. (Sheet.)  
 Forst, Wolfe & Co. (Second hand.)

**MILL SUPPLIES.**

Armstrong, Wolfe, Zimmerman Co.  
 Bassett-Vogel Co.  
 Childs, H. L. & Co., Inc.  
 Colonial Supply Co.  
 Frick & Lindsay Co.  
 General Supply Co., The.  
 Hukil-Hunter Co.  
 Johns-Manville, H. W. Co.  
 Johnson, Morehouse & Dickey.  
 Marine Mfg. & Supply Co.  
 Roebling, John A. Co.  
 Speck-Marshall Co.  
 Standard Supply & Equipment Co.  
 Turner, C. A., Inc.

**MOPS.**

Gerwig, H. & Son.

**MILLINERY.**

Kolb, Bros. & Hulsman.  
 Rose, S. M.

**MEN'S FURNISHINGS.**

Osgood & Silverblatt.  
 Rosenfield & Co.  
 Schein & Lasday.  
 Stein, Nathan.

**MOTORS.**

Wagner Electric Mfg. Co.

**NOTIONS.**

Haines, James B. & Sons Co.  
 Knoepp, Lewis G.  
 Meyer, George E. Co.  
 McCalom, Thomas & Sons.  
 McDonnell, J. P.  
 Pittsburgh Dry Goods Co.  
 Plesset, P. B.

**OFFICE EQUIPMENT.**

Pittsburgh Office & Equipment Co.

**OIL CLOTH.**

Phillips, J. & H.

**OILS.**

Brilliant Light & Oil Co.  
 Eagle Lubricating Oil Co.  
 Gasoline Supply Co.  
 Sun Co., The.  
 Warden & Oxnard.

**OPTICAL GOODS.**

Stieren, William M. Optical Co.

**PACKING.**

Garlock Packing Co.  
 General Asbestos & Rubber Co.  
 Johns-Manville, H. W. Co.

**PAINTS.**

Lucas, John & Co.  
 Pennsylvania Hardware Co.

**PAPER.**

Alling & Cory Co., The.  
 Beeson Paper Co.  
 Chatfield & Woods Co.  
 Frazer, William H.  
 Hartje Paper Co.  
 Huff, Barnes & Opie.  
 Interstate Cordage & Paper Co.  
 Merchants & Manufacturers Paper Co.  
 Seager Bros.  
 West Penn Paper Co.

**PIANOS.**

Frederick, W. F. Piano Co.  
 Hamilton, S. & Co., The.  
 Hoffman, J. M. Co.  
 Long Piano Co.  
 Story & Clark Piano Co.

**PICKLES.**

Lehman, A. G. Co.

**PICTURE FRAMES.**

Chicago Picture Frame Co.  
 Pittsburgh Moulding & Picture Frame Co.

**PILLOWS.**

Emmerich, Charles & Co.

**PIPE.**

Chandler-Boyd Supply Co.

**PLASTER.**

McNulty Bros. Co.

**PLUMBERS' SUPPLIES.**

Anchor Sanitary Mfg. Co.  
 Bailey-Farrell Mfg. Co.  
 Bowman Mfg. & Supply Co.  
 Cowan Mfg. Co.  
 Fort Pitt Supply Co.  
 Harris Pump & Supply Co.  
 Iron City Sanitary Mfg. Co.  
 Oil Well Supply Co.  
 Pittsburgh Sanitary Mfg. Supply Co.  
 Standard Sanitary Mfg. Co.  
 Sterling Sanitary Mfg. Co.  
 Waite-Moffitt Supply Co.

**POOL TABLES.**

Vorweck, Paul.

**POWDER.**

McAbee, E. B.

**PRINTERS' SUPPLIES.**

American Type Founders Co.  
 Chatfield & Woods Co.

**PUMPS.**

Canton-Hughes Pump Co.  
 Pittsburgh Pump Co.

Reincke-Wagner Pump & Supply Co.

**RADIATORS.**

American Radiator Co.

**RAILS.**

Green, L. A. Equipment Co.  
Richardson & Co.

**REFRIGERATING MACHINERY.**

Greenwood Construction & Supply Co.

**REFRIGERATORS.**

McCray Refrigerator Co.

**REGULATORS.**

Iron City Plumbing Co. (Gas.)

**RIVETS.**

National Supply Co.

**ROOFING.**

Anderson & Riley.  
McCombs, William P.  
McGraw, George W.  
White, Scott A.

**ROPE.**

Flocker, John Co.  
Hammon Coupler Co.  
Macomber & Whyte Rope Co. (Wire.)

**RUBBER GOODS.**

Allen Rubber Co.  
Boston Woven Hose & Rubber Co.  
Continental Rubber Works.  
Diamond Rubber Co.  
Empire Rubber Mfg. Co.  
Mechanical Rubber Co.  
Mercer Rubber Co.  
Morgan & Wright.  
N. Y. Belting & Packing Co.  
Pittsburgh Rubber & Supply Co.  
Pittsburgh Rubber & Leather Co.  
Quaker City Rubber Co.  
Republic Rubber Co. of Pittsburgh.  
Revere Rubber Co.  
United States Rubber Co.

**SADDLERY.**

Lyle Bros.

**SAFES.**

Manganese Steel Safe Co.  
York Safe & Lock Co.

**SALOON SUPPLIES.**

Brunswick-Balk-Calender Co.  
Cleveland Faucet Co. of Pittsburgh.  
Heiser & Co.

**SCALES.**

Augdile Computing Scale Co.  
Fairbanks Co., The.  
Howe Scale Co.

**SCIENTIFIC MATERIALS.**

Elliott, B. K. Co.  
Warner Instrument Co.

**SEWING MACHINES.**

Automatic Sewing Machine Co.  
Carter Sewing Machine Co.  
Domestic Sewing Machine Co.  
Singer Sewing Machine Co.  
Standard Sewing Machine Co.  
White Sewing Machine Co.  
Wilcox-Gibbs Sewing Machine Co.

**SHEET METAL.**

Bock, William M. & Co.  
Follansbee Bros. Co.

**SHOES.**

Childs, H. & Co.  
Diamondstone, Louis.  
Forner & Purviance.  
Hellegan, J. & Co.  
Laird & Taylor Co.  
Lang, H. J. Shoe Co.  
Mercer Shoe Co.  
Ray, Thomas K. Co.  
Stewart Bros & Co.  
Wagner Bros.

**SHOW CASES.**

Diamond Show Case Co.  
Pollard, F.  
Saginaw Show Case Co.

**SIGNS, ELECTRIC.**

Goodwin, R. P. Co.

**SOAPs.**

Fairbanks, N. K. Co.  
Globe Soap Co.  
Larkin Co. of Penna.

**SODA FOUNTAINS.**

Duquesne Supply & Extract Co.  
Liquid Carbonic Co.  
McDougall, Edward.

**SPORTING GOODS.**

Grove, John W. Co.  
Spalding, A. G. Bros. Co.  
Sportsman's Supply Co.

**STATIONERY.**

Alexander, George H. & Co., Inc.  
Johnston, Wm. G. & Co.  
McClay, A. W. Co.  
Weldin, J. R. & Co.

**STOGIES.**

Jenkinson, R. & W. Co.  
Zeugschmidt Cigar Co.

**STOVES.**

Demmler & Schenck Co.  
Edmonds, R. E.  
Pittsburgh Stove Supply Co.  
Security Stove & Repair Co.  
Totten, Albert S.

**SURGICAL INSTRUMENTS.**

Heimbolt, Otto.

**SWEEPERS.**

Pittsburgh Wringer & Sweeper Co.

**TABLE WATERS.**

Consolidated Ice Co.  
Water Delivery Co.  
Whann Lithia Water Co.

**TAILORS' TRIMMINGS.**

Bien, C. & A. J.  
Cohen, Julius H.

**TALLOW.**

Pittsburgh Hide & Tallow Co.

**TEAS.**

Campbell & Woods Co., The.  
Mars, A. L. & Co.  
Tetley, Joseph & Co.  
Young-Mahood Co.

**TIN PLATE.**

Demmler Bros.  
McClure Co.  
Walker & Wilcox.

**TINWARE.**

Beiter, Frederick.  
 McClintock, Sprague, Wilhelm Co.  
 Stevenson, George W. Co.  
 Williams, J. A. & Co.

**TIRES.**

Ashton & Heverly Rubber Co.  
 East End Tire Co.  
 Firestone Tire & Rubber Co.  
 Fisk Automobile Tires.  
 Fisk Rubber Co.  
 Goodrich, B. F. Co.  
 Goodyear Tire & Rubber Co.  
 Motor Tire Repair & Supply Co.  
 United States Tire Co.

**TOBACCO.**

Barker, J. W. & G.  
 Friedberg, A. & Bro.  
 Grote, C. H. & Son.  
 Lazier, Jacob.  
 Schmid, W. G. & Co.

**TOOLS, PNEUMATIC.**

Pittsburgh Pneumatic Co., The.

**TOYS.**

Dyer & Co.  
 Grove, John W. & Co.

**TUBES.**

Williams & Co.

**TWINES.**

Beeson Paper Co.  
 Flocker, John Co.  
 Hooven & Allison.  
 Kahle, B. T.  
 Plymouth Cordage Co.

**TYPEWRITERS.**

Monarch Typewriter Co.  
 Oliver Typewriter Co.  
 Remington Typewriter Co.  
 Smith, L. C. & Bro. Typewriter Co.  
 Smith-Premier Typewriter Co.  
 Underwood Typewriter Co.

**UMBRELLAS.**

Tim, John W. & Son.

**UNDERTAKERS' SUPPLIES.**

Murphy, John & Co.  
 United States Casket Co.

**UNDERWEAR.**

Braun, L. & Co.

**UPHOLSTERERS' SUPPLIES.**

Wilhelm, Henry.

**VACUUM CLEANERS.**

Universal Vacuum Cleaner Co.

**VANADIUM.**

Vanadium Sales Co.

**VALVES.**

Chandler-Boyd Supply Co.  
 Fairbanks Co., The.  
 McCausland, W.  
 Pratt & Cady Co.

**VAULTS, CEMENT.**

Waterproof Cement Vault Co.

**WALL PAPER.**

Acme Wall Paper Co.  
 American Wall Paper Co.  
 Eclipse Wall Paper Co.  
 Independent Wall Paper Co.  
 Kerr & Snodgrass.  
 New York Wall Paper Co.

**WASHING MACHINES.**

Washington Washing Machine &  
 Wringer Repair Co.

**WATER HEATERS.**

Beeler Water Heater Co.  
 Gabel Water Heater Co.  
 Standard Water Heater Co.

**WHEELBARROWS.**

Fairbanks Co., The.

**WOOD PIPE.**

Wycoff Wood Pipe Co.

**WOODENWARE.**

Keystone Woodenware Co.  
 Smith, L. H. Woodenware Co.

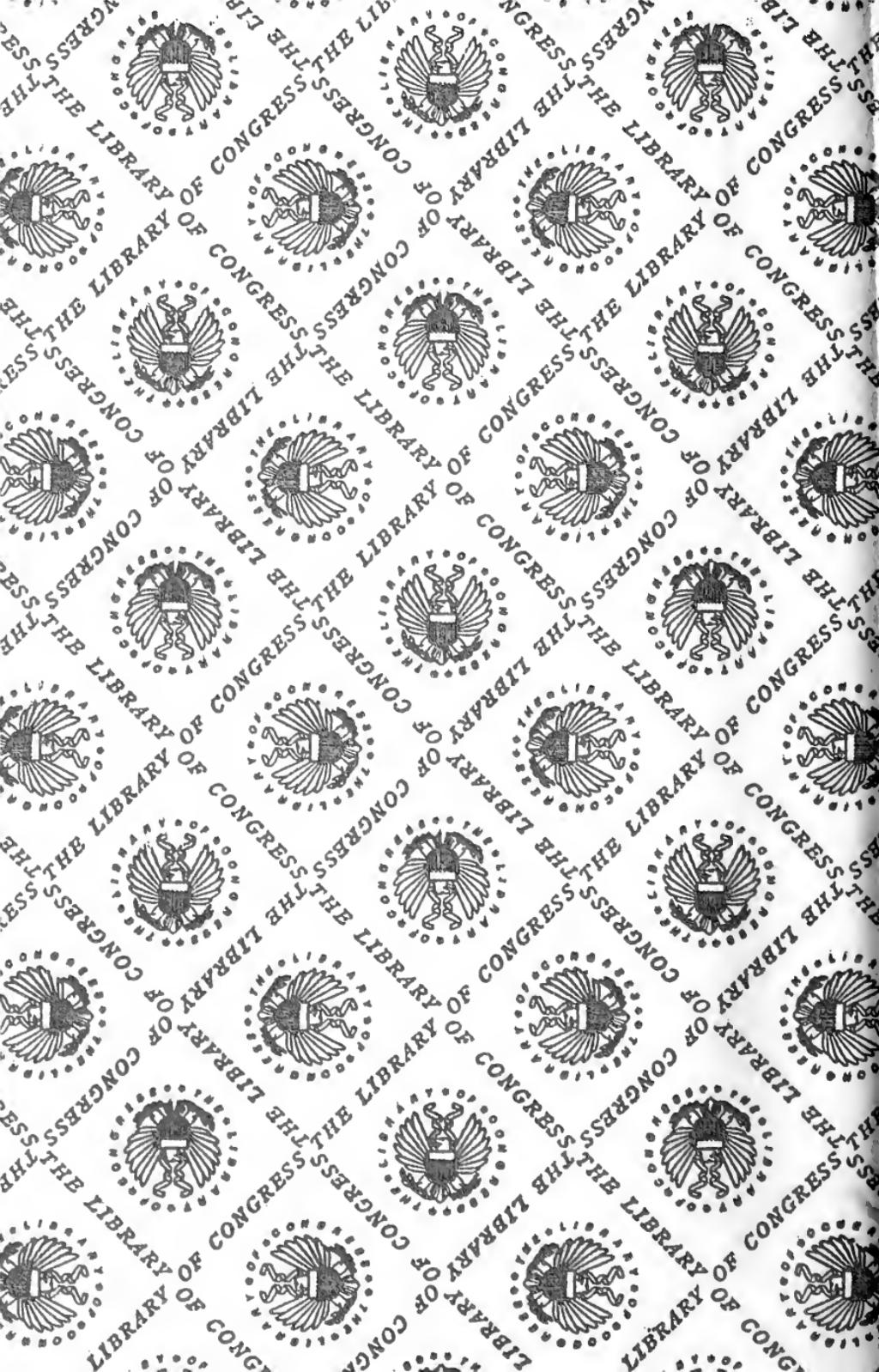
**WOOLENS.**

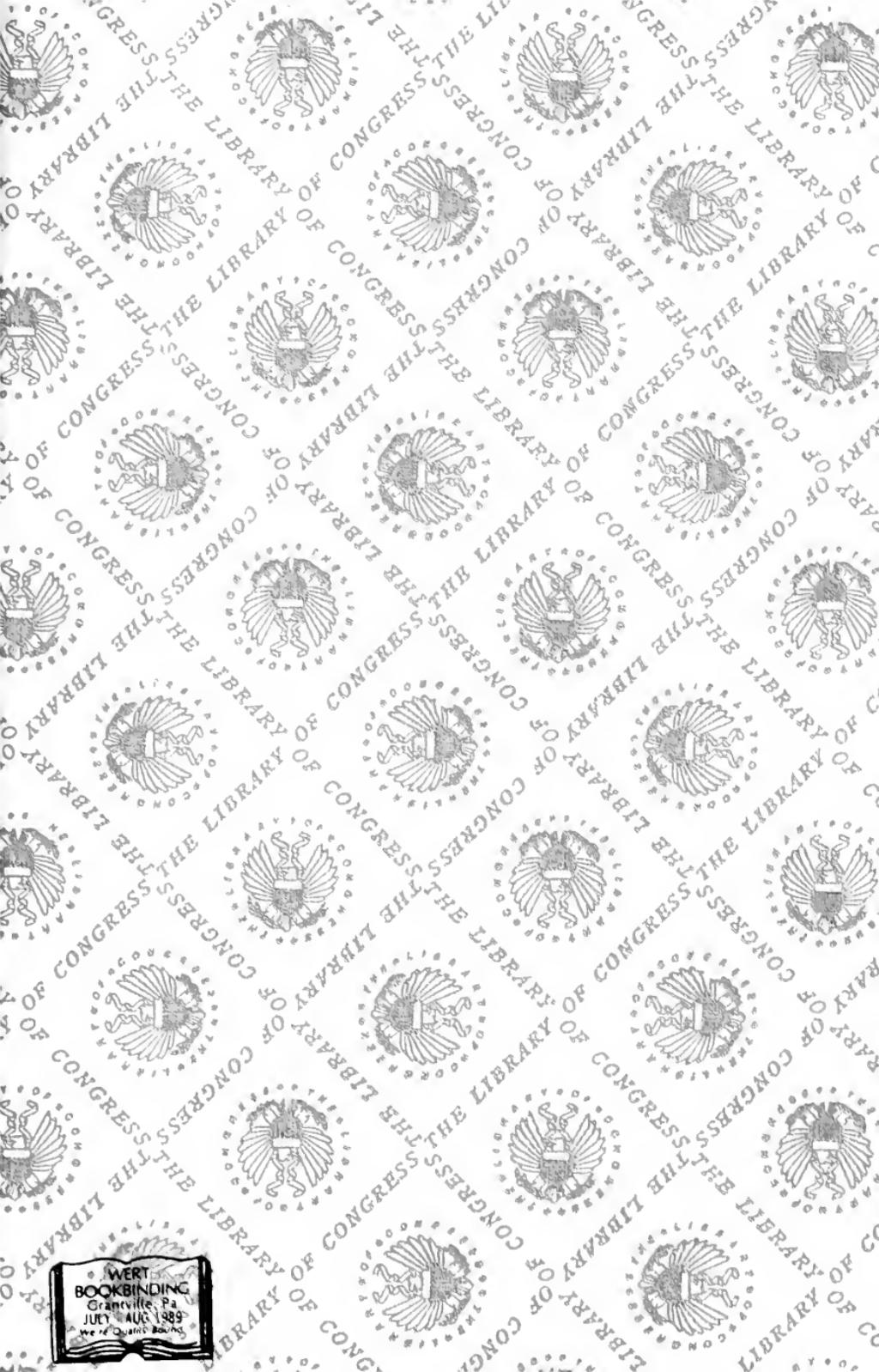
Lando, S. & Co.

**WRINGERS.**

Pittsburgh Wringer & Sweeper Co.







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